Durham/York Residual Waste Study

Draft Report

(referred to as Draft until Final EA Submission)

Thermal Treatment Facility Site Selection Process

Results of Step 7: Evaluation of Short-List of Sites and Identification of Consultants Recommended Preferred Site

September, 2007

GENIVAR

Jacques Whitford

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Thermal Treatment Facility Site Selection Process

Results of Step 7: Evaluation of Short-List of Sites and Identification of Consultants Recommended Preferred Site

September, 2007

prepared by:

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GENIVAR

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September 21, 2007

Ms. Mirka Januszkiewicz,
Director, Waste Management Services
The Regional Municipality of Durham
Works Department
605 Rossland Rd. E.
Whitby, Ontario, L1N 6A3

and

Mr. Andrew Campbell
Director, Solid Waste Management Branch
York Region, Transportation and Works
Department
17250 Yonge Street
Newmarket, Ontario, L3Y 6Z1

Re: Durham/York Residual Waste Study
Report on Evaluation of "Alternative Methods" – Evaluation of Short List of Sites and Identification of the Consultants Recommended Preferred Site

Dear Ms. Januszkiewicz and Mr. Campbell:

GENIVAR Ontario Inc., in association with Jacques Whitford Limited, is pleased to provide this report presenting the Consultant Teams' detailed comparative evaluation of the Short List of sites and recommendation on the Preferred Site for the proposed thermal treatment facility.

Based on the comparative evaluation process we, the Consultant team, recommend that site Clarington 01 is the site that represents the preferred balance of advantages and disadvantages based on the priorities associated with each of the established criteria within the Environmental categories laid out in the report.

It is therefore recommended that the report entitled *Thermal Facility Site Selection Process, Results of Step 7: Evaluation of Short-List of Sites and Identification of Consultants Recommended Preferred Site, September 2007* be released for Public and Agency review.

The Public and Agency review will involve a public comment period of 30 days starting on September 26, 2007 and ending on October 13, 2007.

Notification of the availability of the report will be widely advertised and copies will be distributed to the public and government agencies, local libraries and municipal offices and will be available on the study website for public review.

Public Information Sessions will be held in both Durham and York during October 2007 and a telephone poll will be conducted during late October or early November 2007.

Comments received during the draft report review period will be incorporated in a final report to be submitted to both Regional Councils for approval. It is intended that this approval will be requested in December 2007.

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Yours truly,

GENIVAR Ontario Inc.

Original signed by

D.O. Merriman, M.B.A., P.Eng.
Project Director

Jacques Whitford Limited

Original signed by

Jim McKay, BA.
Environmental Assessment Lead

/djp

[Enclosure]

cc:

Executive Summary

The Minister of the Environment approved the Terms of Reference for the Durham/York Residual Waste Environmental Assessment Planning Study (the Study) on March 31, 2006. In Accordance with the approved EA Terms of Reference, potential siting locations for the preferred technology would be determined and evaluated. Based on the evaluation of these potential locations (Alternatives Methods) it is concluded that the preferred long-term site for a thermal treatment facility for managing the residual waste remaining after achieving 60% to 75% diversion is the site referred to as Clarington 01 which is owned by the Region of Durham, located south of Highway 401, west of Osbourne Road and north of a CN Rail corridor, in the Municipality of Clarington.

ES-1 Preferred Long-Term Residual Processing System

The preferred long-term residuals processing system identified to manage the post-diversion or residual wastes is System 2(a) – Thermal Treatment of MSW and Recovery of Energy followed by Recovery of Materials from the Ash/Char. More specifically, System 2(a) entails the establishment of thermal treatment capacity to process the residual waste stream and recover energy, followed by the removal of materials that may be sold to market from the ash/char residue, and finally the landfilling of all process residues (non-combustible materials removed prior to treatment and from the ash/char).

Although System 2(a) has been has been approved as the Preferred Long Term Residual Processing System, it is important to note that new technologies categorized in System 2(b) – Thermal Treatment of Solid Recovered Fuel were recognized as offering important benefits. As a result it was approved that the competitive process used during the evaluation of Alternative Methods will allow for the submission of proposals to implement both System 2(a) and System 2(b), with the final decision on the technologies used to implement the preferred residuals processing system being based on the results of this competitive process.

ES-2 Identification of the Short-List of Sites

Following the identification of a preferred technology, a seven-step facility site selection process was initiated to identify a Preferred site for development of the Preferred Durham/York residual waste processing system (i.e. a new thermal treatment facility).

Steps 1-5 of the site selection process were completed and issued for public and agency review in March 2007. Through the completion of these steps a Long-list of potential locations were evaluated resulting in the identification of a Short-List of five (5) sites to be carried forward into the Short-List evaluation process. The Short-List of sites are referred to as follows:

- Clarington 01/02
- Clarington 03
- Clarington 04
- Clarington 05
- East Gwillimbury 01

A detailed account of the steps taken to identify the Short-List of sites is provided in the report entitled Draft Report - *Thermal Facility Site Selection Process Results of Steps 1-5 Identification of the Short-List of Alternative Sites, March 2007* [3] available at www.durhamyorkwaste.ca.

After issuing the draft report identifying the Short-List of sites, two of the six sites were removed from consideration. Site Clarington 02 was removed from the Short-List as the land use designation for the property changed in late March 2007 such that the site no longer met Step 2 evaluation criteria. Site Clarington 03 was removed from the Short-List as the site was withdrawn from consideration by the private owner of the property, such that this site could no longer be considered a 'willing seller' property.

ES-3 Step 6: Alignment of Siting Process and Competitive Process

It was originally envisioned in the EA Terms of Reference (Step 6) that potential technology vendors would be provided the opportunity to submit a site along with their technology during the Request for Qualifications (RFQ) process. Under the advisement of procurement and legal counsel, it was determined that these two processes (submission of a site, and submission of technology qualifications) should be completed as two entirely separate processes. Completing these processes as part of the same competitive process could represent an unfair advantage to those vendors offering both a site and a technology versus only those vendors providing a technology and thereby jeopardize the success of the competitive process.

By "uncoupling" the RFQ and Request for Proposals (RFP) process from the siting process, it allowed for a more "fair" process to those involved and also allowed for the completion of siting activities in advance of the completion of the formal RFQ/RFP process for technology(ies). The siting component of Step 6 was addressed through the development of a Request for Expressions of Interest (REOI) which included distribution to potential technology vendors to provide the opportunity for this group to potentially offer up a site through a formal competitive process as described in the approved EA Terms of Reference.

ES-4 Step 7: Evaluation of the Short-List Sites

Following consultation on the Short-List of potential sites, a detailed comparative evaluation of the sites was initiated. This assessment considered a broad range of potential impacts from the potential development of the sites as well as impacts related to the haul routes, transfer requirements and requirements for additional infrastructure to develop the sites.

Step 7 utilized criteria and indicators to measure potential effects. Identification of siting preferences considered relative advantages and disadvantages based on net effects after the consideration of mitigative measures reasonably available to address the potential of an effect being realized.

The evaluation criteria applied at this Step were assembled under 5 categories:

- Public Health and Safety and Natural Environment;
- Social and Cultural;
- Economic / Financial;
- Technical Suitability; and

- Legal.

Table 3.1 in the Draft Report entitled *Thermal Facility Site Selection Process, Results of Step 7: Evaluation of Short-List of Sites and Identification of Consultants Recommended Preferred Site, September 2007* provides a detailed explanation of the evaluation categories, criteria, and indicators as well as the rationale for considering and applying each indicator

Alternative Site Impact Assessments

For the purpose of applying the evaluation criteria and indicators, determining potential effects and the availability of mitigative measures, and the net effects associated with each Short-List site, detailed impact assessments were completed by experts in the disciplines associated with each criterion. The results of the impact assessments are detailed in separate reports as follows:

- Report on Potential Air Quality Impacts
- Report on Potential Water Quality Impacts (Surface Water and Groundwater)
- Report on Potential Environmentally Sensitive Areas and Species Impacts and Potential Aquatic and Terrestrial Ecology Impacts
- Report on Compatibility with Existing and/or Proposed Land Uses
- Report on Archaeological and Cultural Resources
- Report on Potential Traffic Impacts
- Report on Capital Costs, Operation and Maintenance Costs
- Report on Compatibility with Existing Infrastructure and Design/Operational Flexibility
- Report on Complexity of Required Approvals and Agreements

Short-List Sites Advantages and Disadvantages

The following table summarizes the advantages and disadvantages associated with each of the Short-List sites based on net effects associated with the evaluation criteria categories:

Table ES-4.1 Summary of Short-List Sites Advantages and Disadvantages

Environmental Category	Clarington 01	Clarington 04	Clarington 05	East Gwillimbury 01
PRIORITY: HIGH				
Public Health and Safety and Natural Environment Considerations	ADVANTAGE	NEUTRAL	MAJOR DISADVANTAGE	DISADVANTAGE
PRIORITY: MEDIUM				
Social and Cultural Considerations	ADVANTAGE	DISADVANTAGE	DISADVANTAGE	NEUTRAL
Economic/Financial Considerations	ADVANTAGE	DISADVANTAGE	NEUTRAL	NEUTRAL
Technical Considerations	ADVANTAGE	NEUTRAL	ADVANTAGE	ADVANTAGE
PRIORITY: LOW				
Legal Considerations	NEUTRAL	DISADVANTAGE	DISADVANTAGE	NEUTRAL

Table ES-4.1 Summary of Short-List Sites Advantages and Disadvantages

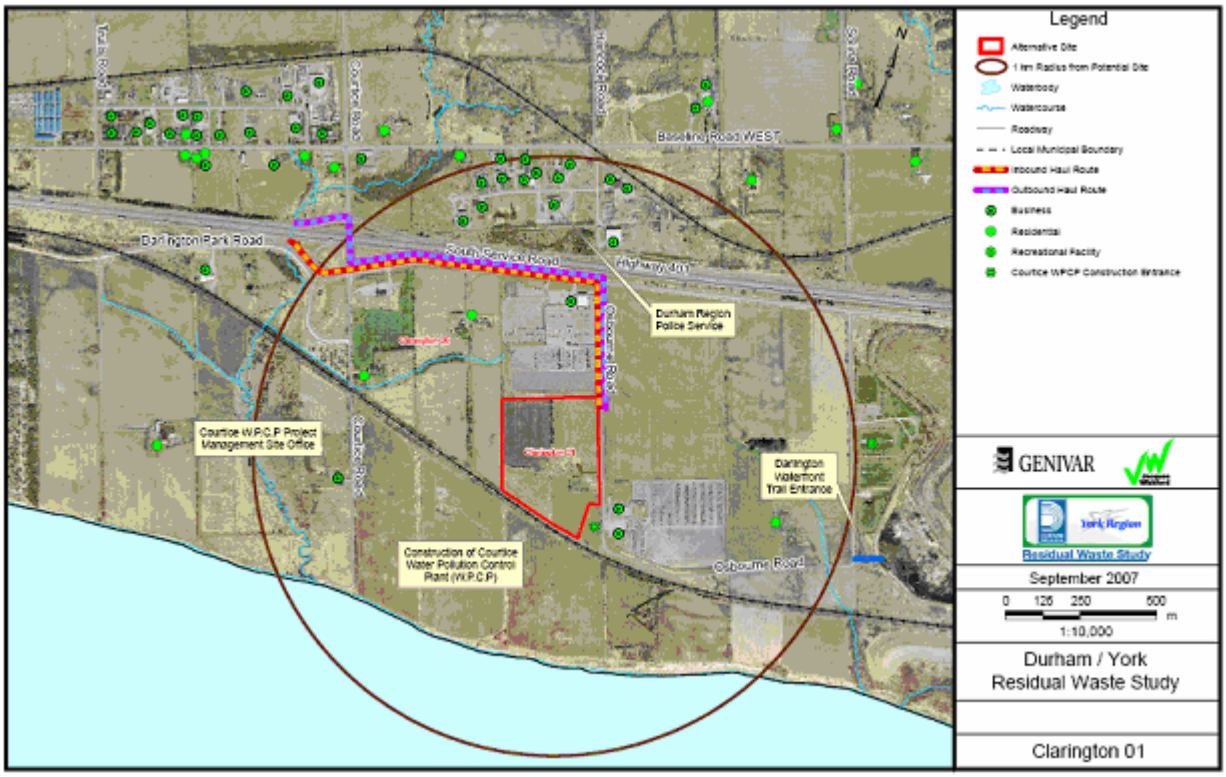
Environmental Category	Clarington 01	Clarington 04	Clarington 05	East Gwillimbury 01
Overall:	**ADVANTAGE**	**DISADVANTAGE**	**DISADVANTAGE**	**NEUTRAL**

Based on the consideration of the advantages and disadvantages, the Recommended Preferred site to manage the post-diversion or residual wastes from the proposed thermal treatment facility is Clarington 01. This site is considered to represent the preferred balance of advantages and disadvantages based on the priorities associated with each of the environmental considerations noted in the above table.

ES-5 Description of Recommended Preferred Site, Clarington 01

Site Clarington 01, illustrated in the following Figure ES-5.1, is undeveloped land owned by the Region of Durham, south of Highway 401 in the Municipality of Clarington. The site is located on the west side of Osbourne Road north of a CN Rail corridor. There are commercial properties north of the site. The lands east and west of the site are undeveloped and are currently used for agricultural purposes. The Courtice Water Pollution Control Plant, which is scheduled to be completed in 2007, is being built just south of the site. The Darlington Nuclear Generating Station is located approximately 0.5 kilometres to the east. The nearest major intersection is Highway 401 and Courtice Road, which is approximately 1.7 kilometres from the site. The site is approximately 12.1 hectares in area and is located in the Clarington Energy Park.

Figure ES-5.1 Recommended Preferred Site Location



ES-6 Next Steps

The following provides an outline of the next steps in the completion of the Durham/York Residual Waste Study.

Public and Agency Consultation

On September 25, 2007 the Joint Waste Management Group will receive the Consultants Recommendation on the Preferred Site and will be requested to authorize the release of the Draft Report entitled *Thermal Facility Site Selection Process, Results of Step 7: Evaluation of Short-List of Sites and Identification of Consultants Recommended Preferred Site, September 2007* including all supporting documentation for public and agency consultation. With authorization, the public and agency consultation will be completed as follows:

1. The consultant team's draft report and supporting documentation will be released to the public and government review agencies for a period of 30 days starting on September 26, 2007 and ending on October 13, 2007.

2. Notification will be issued of the availability of the draft report by way of direct contact with the established public and government review agency list and by way of the website and local media for the general public.

3. Copies of the draft documentation will be forwarded to the public and government agencies in the established contact lists and copies placed in the local libraries, municipal offices and on the study website for public review.

4. Public Information Sessions will be held in both Durham and York during October, 2007. These sessions will be held to allow the public an opportunity to ask questions of the consultants and Regional staff.

5. A telephone poll will be conducted during late October or early November, 2007, reaching individuals in Durham and York Regions to determine their support for the Recommended Preferred site.

6. Comments received during the draft report review period will be documented and included in the final report on the Preferred site to be submitted to both Regional Councils for approval. Comments will be considered and addressed, as appropriate, during finalization of this report.

Preparation of an Interim EA Planning Document

Following the approval of the Preferred site by Durham and York Regional Councils, an Interim EA Planning document will be prepared. This document will outline the EA process followed to date, including:

1. Development and approval of the EA Terms of Reference;

2. Evaluation of Alternatives to and the identification of thermal treatment as the Preferred system; and,

3. Evaluation of Alternative Methods and the identification of the Preferred site.

This document will form the basis of the draft EA document that will be submitted to the Minister of the Environment in late 2008/early 2009. Over the course of 2008, the Interim EA Planning document will be updated as additional studies are completed and the preferred technology vendor is identified. At that time the formal EA submission (including a draft and final EA document) will be prepared.

Competitive Process to Identify the Preferred Technology Vendor

The engagement of the private sector to Design, Build and Operate the proposed thermal treatment facility is being undertaken in two (2) stages as follows:

Stage 1: Request for Qualifications

On July 12, 2007, Durham Region's Finance Department, co-ordinated and issued a Request for Qualifications (RFQ) for the Thermal Treatment of Residual Waste. This RFQ along with the Request for Proposals (scheduled to be issued in early 2008) form part of the evaluation of Alternative Methods and will be documented in a separate summary report.

The release of the RFQ is the first step in the process of the Regions of Durham and York identifying, assessing the qualifications of, and ultimately selecting a vendor and a specific form of thermal treatment technology that meets the aforementioned principles. Those proponents who respond to this RFQ, and satisfy its requirements, will be qualified to submit a detailed proposal.

Stage 2: The Request for Proposal Process

Following completion of the RFQ stage, Qualified Respondents will be invited to provide detailed proposals in response to an RFP that will include the design, construction and operating contract (collectively the "RFP"). The RFP will describe the Regions' requirements and performance expectations for design, construction and operation of the thermal treatment facility. The Regions will evaluate the detailed proposals received from the Qualified Respondents. The Regions will also seek any necessary clarifications, and then determine whether the Regions' objectives can be met. After reviewing the RFP submissions, the successful Qualified Respondent (the "Preferred Vendor") will be selected for the purposes of concluding a contract.

The above timing is tentative and subject to change at the sole discretion of the Regions.

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Annexes

1. Introduction

This introduction provides an overview of waste management within the two Regions, the Environmental Assessment Act (EAA), the ongoing evaluation of "Alternative Methods" and the Supporting Documentation being prepared to identify a Recommended Preferred long-term Durham/York thermal treatment facility location.

1.1 Overview of the Durham/York Residual Waste EA Study

Durham and York Regions (the Regions) have partnered to undertake a joint Residual Waste Planning Study. Both municipalities are in need of a solution to manage the solid waste that remains for disposal after diversion (residual or post-diversion waste). The Regions are working together to address the social, economic, and environmental concerns of residents through an Environmental Assessment (EA) Study process to examine potential long-term residual waste management alternatives.

Shared Issues

Even with the expanded diversion efforts, Durham and York continue to face the challenge of managing residual waste that cannot be currently diverted. Both Regions face a shortage of available landfill capacity over the long term. In response to the closing of existing landfill sites in the Greater Toronto Area (GTA) and the inability to develop new landfill capacity, Durham and York, along with other GTA municipalities, were forced to enter into contracts for the export of their residential waste to disposal facilities located primarily in the State of Michigan. On August 31, 2006 Michigan Senators announced they had reached an agreement with the Province of Ontario to end shipments of Municipal Solid Waste (MSW) to Michigan by 2010. Following 2010, Ontario Municipalities including Durham and York will no longer have the option of disposal of MSW in Michigan landfills.

Shared Opportunities

Facing common waste disposal issues, the Regions are acting to implement, as quickly as possible, a Durham/York based solution that: is socially and politically acceptable to both communities; maximizes environmental protection; and, fosters the wise management of potential resources which are currently lost by way of landfill in Michigan. In addition to solving long-term, residual waste management issues, Durham and York, recognize the growing need for additional sources of energy generation in Ontario. Both Regions recognize that there is an opportunity associated with the utilization of the waste stream as a fuel source to produce energy and have identified this opportunity as a key benefit associated with the subject waste disposal EA Study.

1.2 The Environmental Assessment Act

An EA Study provides a planning approach where environmental constraints or opportunities are considered in the context of the broadly defined environment (i.e. the natural environment as well as the social, economic and heritage and other environments relevant to the undertaking) and potential effects are understood and addressed before development occurs. Since the enactment of the *Environmental Assessment Act (EAA)* in the 1970s, the environmental assessment (EA) process has evolved into the completion of a decision-making process that is

carried out in consultation with the public and other interested parties. The EA process evaluates: alternatives considering potential effects on the environment; the availability of mitigative measures that address, in whole or in part, the potential effects; and, the comparison of the advantages and disadvantages of the remaining or "net" effects. The result of this process provides the planning rationale and support for a preferred approach and method to implement the undertaking.

This process can be considered as consisting of three parts:

PART A – The EA Terms of Reference

PART B – The Evaluation of "Alternatives To" the Undertaking

PART C – The Evaluation of "Alternative Methods" of Implementing the Undertaking

1.2.1 The EA Terms of Reference

Under the EA Act, an Environmental Assessment (EA) Terms of Reference must be prepared and submitted to the Minister of the Environment for approval before an EA Study can be undertaken. The purpose of the EA Terms of Reference is to describe in a clear and concise manner the purpose of the proposed undertaking and how the proponent intends to carry out an environmental assessment. This description includes the proposed evaluation methodology and criteria for the evaluation of alternatives, including, in this case, the process to be applied in the identification of a Preferred site. The EA Terms of Reference, once finalized and approved by the Minister of the Environment, becomes the guiding document for the completion of the EA study and the EA documentation. On March 31, 2006, the Durham/York Residual Waste EA Terms of Reference[1] was approved by the Minister of the Environment.

The purpose of the undertaking (i.e. what the outcome of this EA Study is intended to do) as described in the approved EA Terms of Reference is:

> *"To process - physically, biologically and/or thermally - the waste that remains after the application of both Regions' at-source waste diversion programs in order to recover resources - both material and energy - and to minimize the amount of material requiring landfill disposal.*
>
> *In proceeding with this undertaking only those approaches that will meet or exceed all regulatory requirements will be considered."*

A copy of the approved EA Terms of Reference document may be obtained from the study website, www.durhamyorkwaste.ca.

1.2.2 The Evaluation of "Alternatives To" (i.e., Technologies)

The evaluation of "Alternatives To" the undertaking serves as the first step in the completion of the Durham/York Residual Waste EA. "Alternatives To" are defined as fundamentally different ways of managing waste and achieving the purpose of the undertaking. To fully address the purpose of the undertaking, different waste management approaches capable of processing and recovering resources from post-diversion waste were combined into alternative residuals

[1] Durham/York Residual Waste Study - Approved Environmental Assessment Terms of Reference, March 31, 2006.

processing systems. The Durham/York Residual Waste Study EA Terms of Reference established that alternative systems comprised of the following approaches and technologies would be formulated and evaluated:

- Mechanical Treatment;
- Biological Treatment; and
- Thermal Treatment.

The following four alternative systems were formulated using the alternative processing approaches from the approved EA Terms of Reference:

- System 1 - Mechanical and Biological Treatment with Biogas Recovery.

  This system includes mechanical processing of the post-diversion waste to recover any remaining recyclable materials and to separate out the organic fraction for biogas generation via anaerobic digestion. The biogas would be combusted to produce electricity and heat. The stabilized residue from this system would be disposed in a landfill.

- System 2(a) – Thermal Treatment of Mixed Waste with Recovery of Materials from the Ash / Char.

  This system involves the thermal treatment (by combustion, gasification or pyrolysis) of the post diversion waste to produce electricity and heat. The resulting ash would be processed to recover metals for recycling, with the remaining ash disposed in a landfill.

- System 2(b) – Thermal Treatment of Solid Recovered Fuel

  This system includes mechanical and possibly biological processing (composting) of the post diversion waste to recover recyclable materials and produce a solid recovered fuel (SRF). The SRF is then thermally treated (by combustion, gasification or pyrolysis) to produce electricity and heat. The residues from the processing of the residual waste and ash/char from the thermal treatment process would be disposed in a landfill.

- System 2(c) – Thermal Treatment of Solid Recovered Fuel with Biogas Recovery

  This system includes mechanical processing of the post diversion waste to recover recyclable materials, to separate out the organic fraction for biogas generation via anaerobic digestion and to and produce a solid recovered fuel (SRF). Electricity and heat are produced through combustion of the biogas and thermal treatment of the SRF. The residues from the processing of the residual waste, stabilized anaerobic digestion residue and ash/char from the thermal treatment process would be disposed in a landfill.

On May 30, 2006 the report entitled the "*Evaluation of "Alternatives To" and Identification of the Preferred Residuals Processing System*" was released, documenting the results of the evaluation of the alternative systems. Based on the consideration of relative advantages and disadvantages and the environmental priorities established through public and agency consultation, the Preferred long-term residuals processing system was identified as *System 2(a) – Thermal Treatment of MSW and Recovery of Energy followed by Recovery of Materials from the Ash/Char*.

System 2(b) also exhibited an acceptable range of advantages and disadvantages. For some of the criteria where System 2(b) did not rank equivalent to System 2(a), (technical risks, costs and legal/contractual risks for example), the determination of the relative advantages and disadvantages was based upon the information that was readily available on both the mechanical and biological processes that are being used to recover solid fuel in other jurisdictions and on the thermal technologies that can process this fuel. Many of the technologies that could be used to thermally treat the solid recovered fuel (e.g., gasification) in System 2(b) are regarded as "new technologies", with active research and development, but are less proven than the System 2(a) technologies that are currently available to combust residual waste.

In June 2006, Durham and York Regional Councils approved System 2(a) as the Preferred residuals processing system and determined the competitive process should allow for the submission of proposals to implement either System 2(a) or System 2(b), and that the final decision on the technologies be based on the results of this competitive process.

1.3 The Evaluation of "Alternative Methods" (i.e., Facility Siting)

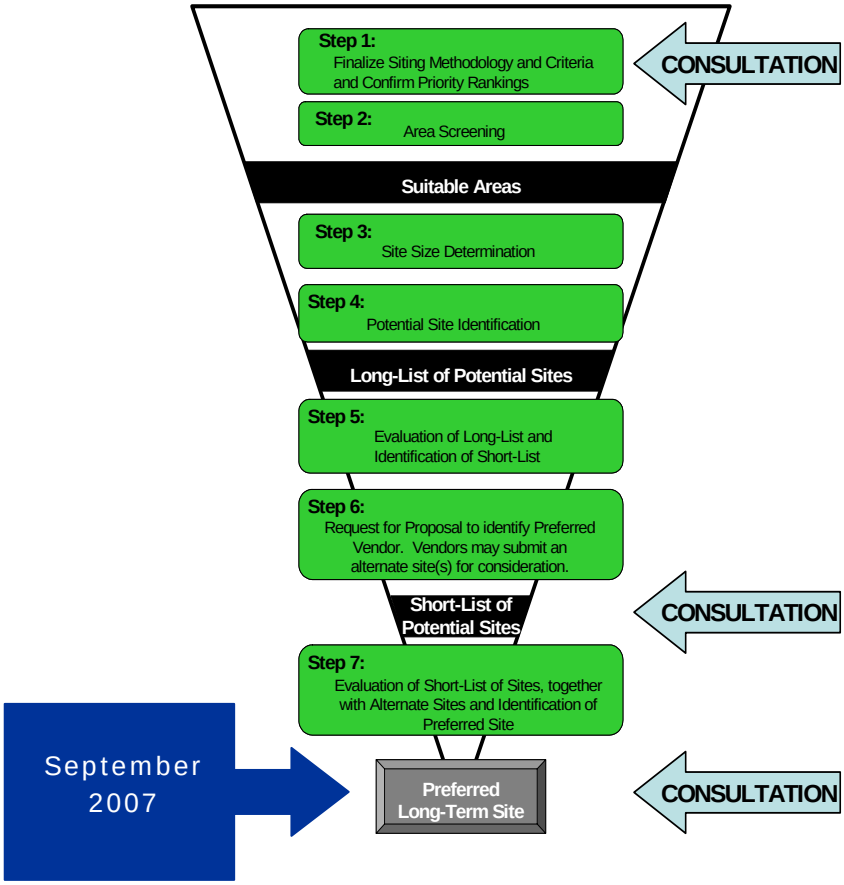
Following the identification of a Preferred technology, a seven-step facility site selection process, outlined in Figure 1.1 below was initiated to identify a Preferred site for development of the Preferred Durham/York residual waste processing system (i.e. a new thermal treatment facility).

To identify a Preferred site, a seven-step facility site selection process, outlined in Figure 1-1 is being applied. This step-by-step methodology was originally presented in the approved EA Terms of Reference[2] and in Background Document 2-3[3] (prepared as supporting documentation to the approved EA Terms of Reference).

1.3.1 Step 1: Finalize Evaluation Methodology and Criteria

[2] Durham/York Residual Waste Study - Approved Environmental Assessment Terms of Reference, March 31, 2006.
[3] Durham/York Residual Waste Study - Background Document 2-3 "Consideration of Alternative Methods of Implementing the Undertaking", December 16, 2005.

Figure 1-1 Overview of the Facility Siting Process



The site selection methodology and criteria, outlined in the approved EA Terms of Reference, were generally, accepted by the consultation participants. However, the following aspects of the site selection methodology were refined based on input received during the consultations.

1) – Removal of Separation Distances at the Step 2: Area Screening Stage
2) – Consideration of Siting Opportunities within the Greenbelt Plan Area
3) – Identification of Public and Private sites simultaneously
4) – Separation of the Siting Process from the Competitive Process

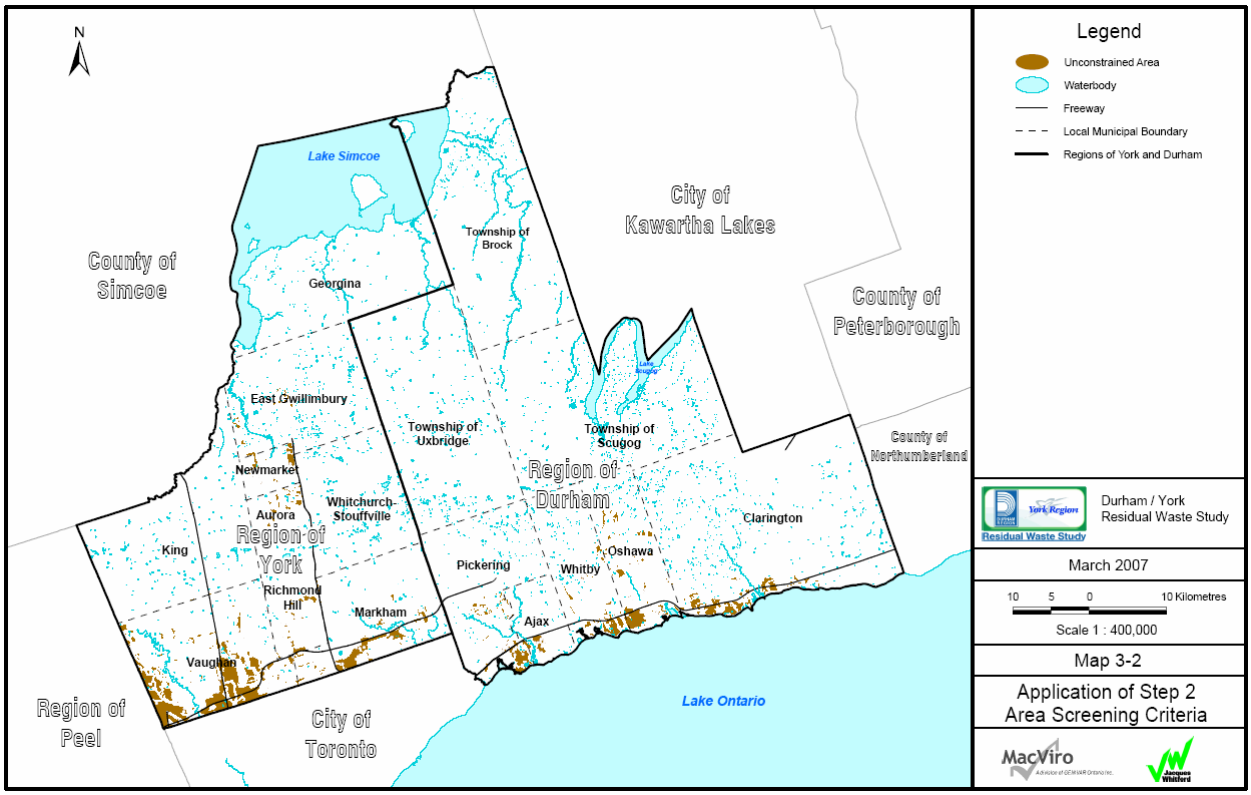
1.3.2 Step 2: Area Screening Process

Following the confirmation of the siting evaluation methodology and criteria at Step 1, the next step was to define the areas within in which a suitable site could be identified. Initiation of this area screening process began with the delineation of the limits of the broad area, within Durham and York that consists of features and land uses considered unsuitable for the establishment of a thermal treatment facility. It was important to conduct this high level screening early in the planning stage to ensure that only sites located within potentially suitable areas (i.e., unconstrained areas), such as designated industrial lands, would undergo the detailed comparative evaluation process. This initial screening process ensured that unsuitable areas, such as significant natural features, agricultural lands and existing residential areas would not be considered further in the siting process.

The result of this second step was the identification of areas within Durham and York that are considered generally suitable for the purposes of locating the preferred thermal treatment facility.

Step 2 revealed that the areas considered as unconstrained make up a small percentage of the Durham and York Study Area. These areas are primarily located in Durham Region along the Highway 401 corridor and in York Region along the Highway 404 and Highway 407 corridors. These areas consist of primarily industrial and commercial land uses, located away from city centres and suburban communities. These areas are illustrated in the following Figure 1-2.

Figure 1-2 Areas Potentially Suitable to Site a Thermal Treatment Facility



1.3.3 Step 3: Site Size Determination

To assist in the identification of potential sites within the remaining areas, considered potentially suitable for the establishment of a thermal treatment facility, the number of sites required and the minimum required site size was determined.

Single versus Multiple Site Scenarios

During the evaluation of technologies/systems it was determined that a 'single facility, single site' approach would be the best alternative for Durham and York Regions based on the following rationale:

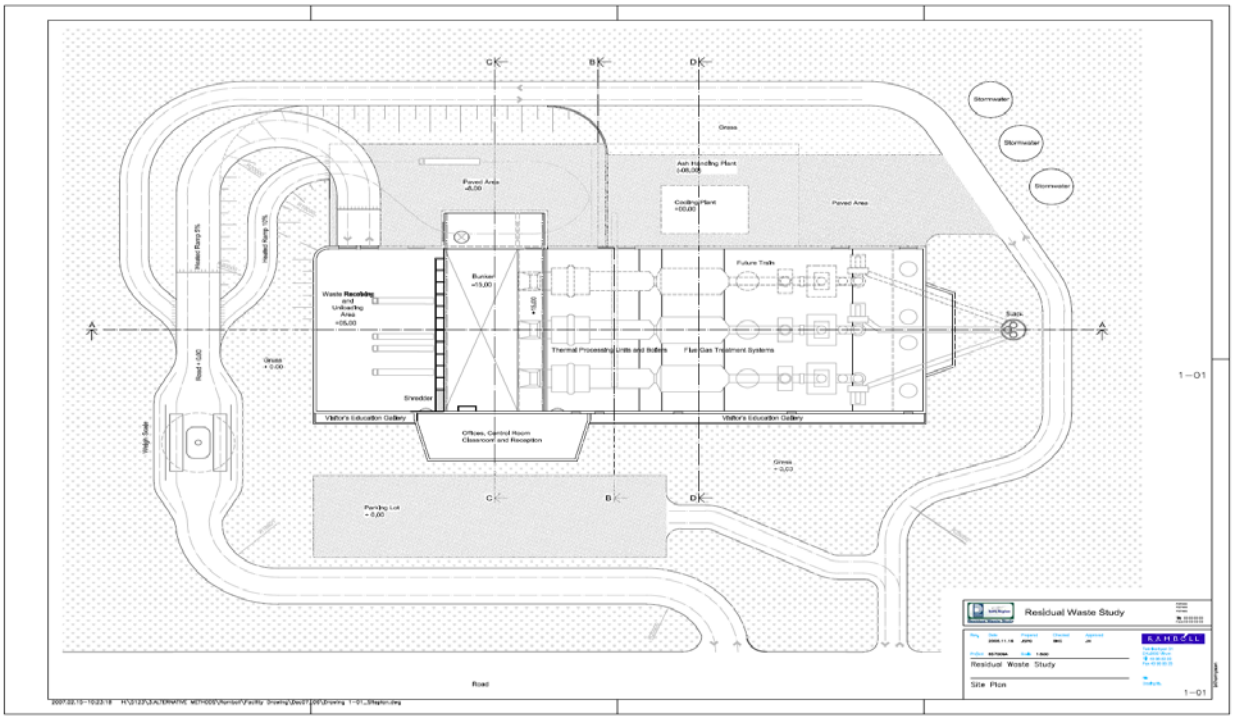
- A 'single facility, single site' system configuration represents the most efficient system configuration and would provide the economies of scale that are being sought in the Durham/York EA study;

- In general, a 'single facility, single site' configuration also represents the configuration that would be expected to have a lower potential for environmental and social impacts, as the total land area required and number of potential receptors that could be impacted by a waste management system increases as the number of sites required for each thermal treatment system increases.

Facility/Site Size Requirements

The ultimate capacity of the thermal treatment facility is estimated to be 400,000 tonnes per year of MSW, at the end of the 35-year planning period for the study. Figure 1-3 provides a conceptual layout of the proposed thermal treatment facility.

Figure 1-3 Conceptual Layout of the Proposed Thermal Treatment Facility



A "stand-alone" facility, such as that above, with provision for expansion from 250,000 to 400,000 tonnes per year, on-site ash processing, stormwater management features, parking for 100 vehicles, on-site roads for full management and queuing of waste and ash vehicles and adequate buffer zones and set-backs would require approximately 13.7 hectares of developable area assuming a 100m buffer on all sides of the facility and 7.3 hectares of area without assuming a 100 metre buffer. A smaller parcel of land may be capable of meeting the minimum facility size and infrastructure requirements where some required infrastructure may already exist on a companion site or where the potential exists for infrastructure sharing between neighbouring sites.

Minimum site size requirements were confirmed as part of Step 7 of the siting process.

1.3.4 Step 4: Site Identification Process

Following the identification of potentially suitable areas and the determination of the minimum site size and configuration requirements, Step 4 was completed to identify a list of potential sites. To establish this list of sites, siting opportunities were identified in the following order:

- Step 4.1 - Identification of Publicly Owned Sites
- Step 4.2 - Identification of Willing Seller Sites

It was decided at the outset of this process, based on comments received from a number of agencies, that the Regions would undertake a review of both publicly owned sites, as well as willing seller sites to ensure that both public and private sector siting opportunities were explored.

To identify potential sites that met the willing seller criteria, the Regions undertook two (2) separate processes to identify willing sellers with suitable sites:

- November 2006 - Call for Willing Sellers
- February 2007 - Request for Expressions of Interest (REOI) – Potential Sites for a Proposed New Thermal Treatment Facility for the Regions of Durham and York. This REOI also addressed the technology vendor site identification option of Step 6 in the approved EA Terms of Reference.

Twelve (12) Sites Identified

The site identification process resulted in the identification of twelve (12) siting opportunities as follows:

Public Sites	"Willing Seller" Sites
East Gwillimbury (1)	Vaughan (1)
Clarington (2)	Pickering (1)
	Whitby (1)
	Oshawa (2)
	Clarington (3)
	Brock Township (1)

The approved EA Terms of Reference also provided for additional site identification opportunities, if required, as outlined below.

- Step 4.3 - Identification of Additional Privately Owned Sites (Negotiated)
- Step 4.4 – Adjust Screening Criteria and Re-apply

There was no set guideline for what constituted a reasonable number of sites on which to conduct preliminary investigations. However, following the completion of the above tasks, the study team determined that a suitable number of sites, offering a reasonable range of alternatives and features were identified and therefore there was no need to identify additional sites through Steps 4.3 and 4.4.

The sites identified above, are primarily located on the outer limits of urban development. Typically, when siting these types of facilities it is advantageous to locate the facility close to where the majority of the waste is being generated. However, due to size of the site required for this facility and the trends in urban growth in both Durham and York Region (ie., Residential neighbourhoods developing in close proximity to industrial lands), the siting opportunities within the urban industrial areas were limited.

Five (5) Sites Removed from Further Consideration

Application of the Area Screening process and Site Size requirements to the twelve public and privately owned potential sites removed five (5) sites from further consideration as follows:

- **Vaughan (1)** - Constrained by Natural Features
- **Pickering (1)** - Insufficient area (6.3 hectares)
- **Oshawa (2)** - Constrained by Natural Features
- **Brock Township (1)** - Designated Agricultural land and Constrained by Natural Features

1.3.5 Step 5: Long-list Evaluation Process

Completion of the preceding steps resulted in the identification of seven (7) sites that form the Long-list of alternative sites. The purpose of establishing and evaluating a Long-list of prospective sites was to reduce the number of sites to a Short-List that would then be compared in greater detail. It is important to conduct this level of evaluation to ensure that only sites with a reasonable chance of being selected would undergo the more detailed comparative evaluation process. For each of the Long-list sites, data was collected, reviewed and applied in accordance with the Long-list evaluation factors identified below:

- Proximity to Required Infrastructure
- Site Accessibility
- Potential Impacts of Haul Route(s)
- Site Size
- Land Use Compatibility
- Site Availability
- Potential Impacts on Unregulated Airports

Overview of Long-list Sites Relative Advantages and Disadvantages

In accordance with the approved EA Terms of Reference, the evaluation of the Long-list of alternative sites incorporates a comparative evaluation process. Table 1.1 below presents the relative comparison of each of the sites based on their respective advantages and disadvantages.

Table 1.1 Comparison of Long-list Sites Relative Advantages and Disadvantages

Evaluation Criteria	Clarington 01	Clarington 02	Clarington 03	Clarington 04	Clarington 05	Whitby 01	East Gwillimbury 01
Proximity to Required Infrastructure	ADVANTAGE	ADVANTAGE	ADVANTAGE	ADVANTAGE	ADVANTAGE	ADVANTAGE	ADVANTAGE
Site Accessibility	ADVANTAGE	ADVANTAGE	ADVANTAGE	ADVANTAGE	ADVANTAGE	ADVANTAGE	ADVANTAGE
Potential Impact of Haul Route	ADVANTAGE	ADVANTAGE	ADVANTAGE	ADVANTAGE	ADVANTAGE	DISADVANTAGE	ADVANTAGE
Property Size	ADVANTAGE	ADVANTAGE	ADVANTAGE	ADVANTAGE	ADVANTAGE	ADVANTAGE	ADVANTAGE
Land Use Compatibility	ADVANTAGE	ADVANTAGE	ADVANTAGE	ADVANTAGE	ADVANTAGE	DISADVANTAGE	ADVANTAGE
Availability of Site	ADVANTAGE	ADVANTAGE	DISADVANTAGE	DISADVANTAGE	DISADVANTAGE	DISADVANTAGE	ADVANTAGE
Proximity to Unregulated Airports	ADVANTAGE	ADVANTAGE	ADVANTAGE	ADVANTAGE	ADVANTAGE	ADVANTAGE	ADVANTAGE

1.3.6 Results of the Long-list Evaluation Process and Identification of the Short-List of Sites

The evaluation of the Long-list of sites resulted in the following:

a) One (1) Site Considered Significantly Disadvantaged

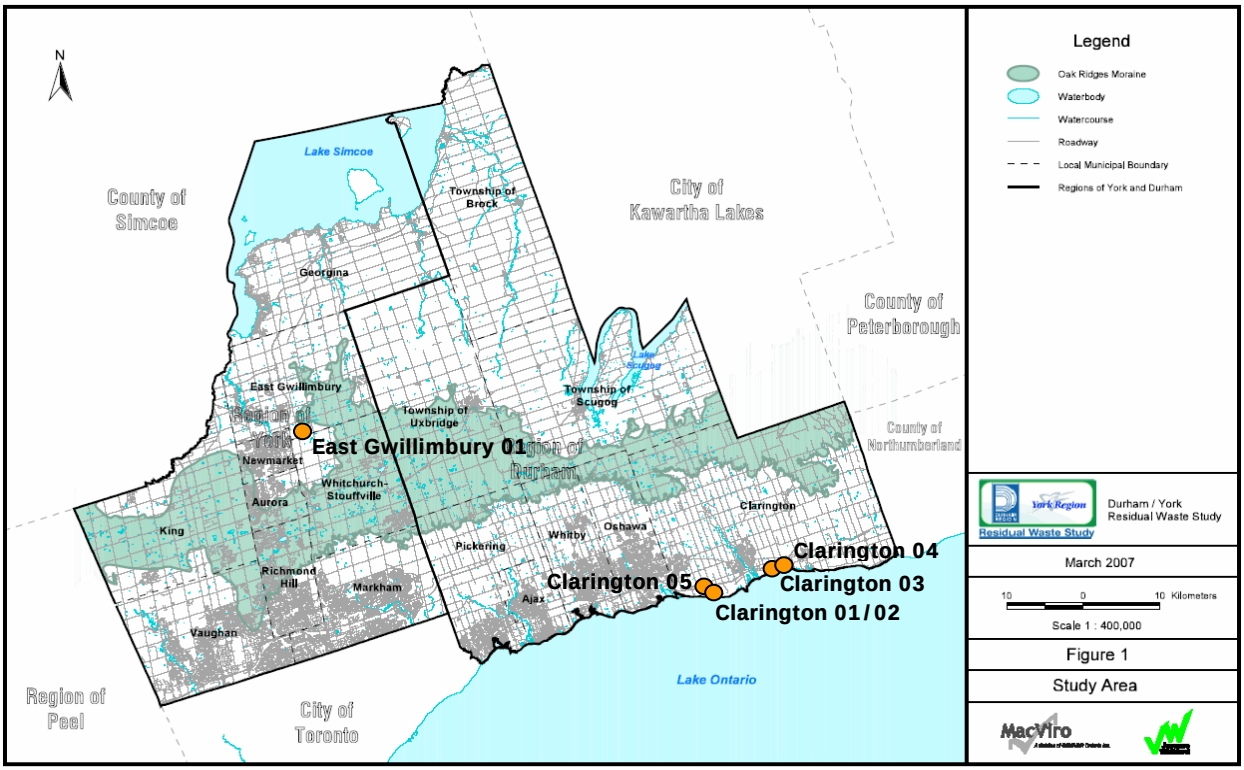
Exhibited a significant number of disadvantages relative to other sites on the Long-list. This site is located near Natural Heritage Features including; Areas of Natural and Scientific Interest (ANSI), Environmentally Sensitive Areas (ESA), Wetlands, community parks and residential areas and was therefore removed from further consideration.

b) Pairing of Clarington 01 and Clarington 02 sites

Based on a more detailed review of sites Clarington 01 and Clarington 02, it was determined that these sites should be considered as a single site made up of two (2) parcels for the purposes of evaluation of the Short-List of sites. These sites are very similar in size, location, ownership, natural features, and proximity to required infrastructure.

Removal of one (1) site from further consideration and pairing of two (2) Clarington sites resulted in a Short-List of five (5) sites to be carried forward into the Short-List evaluation process. Figure 1-4 identifies the location of these sites within the Regions of Durham and York.

Figure 1-4 The Short-List of Alternative Sites



A detailed account of the steps taken to identify the Short-List of sites is provided in the report entitled "*Draft Report - Thermal Facility Site Selection Process Results of Steps 1-5 Identification of the Short-List of Alternative Sites, March 2007*" [3] available at www.durhamyorkwaste.ca.

1.4 Public and Agency Consultation on the Short-List of Sites

The approved EA Terms of Reference includes a consultation plan that identifies points in the study where the public and agencies are to be contacted for consultation, as well as who will be contacted and how consultation will be approached. Public information sessions regarding the evaluation of the Short-List of alternative sites were held in York and Durham Regions on April 10th, 12th, 14th, and 21st, 2007 in order to present, discuss and receive public input on the Short-List of sites identified for the proposed Thermal Treatment Facility. The rationale behind the identification of each site was presented at these sessions including:

- An overview of the Study to-date;
- A review of the process used to identify potential sites;
- A discussion of the Short-List of sites, how they were identified, and a request for public input; and,
- An overview of the next steps in the process.

In total, 380 attendants registered for the four (4) sessions as outlined below:

- April 10, 2007 (York) - 85 registered attendants
- April 12, 2007 (Durham) - 155 registered attendants
- April 14, 2007 - (Durham) - 74 registered attendants
- April 21, 2007 (Durham) - 66 registered attendants
- Total: 380 registered attendants

In addition to the these consultation events, the EA consultation process included several other opportunities for the public, agencies and other interested parties to obtain information and provide comments on the Short-List of alternative sites, including:

- Posting of Study information on the websites for both Durham (www.region.durham.on.ca) and York (www.region.york.on.ca) Regions including: a description of the Study background together with key Study documents as they became available; and, an online comment form (providing email address and contact information relevant to the Study) to allow residents to share their comments with the Study Team. A joint Study website has been developed and includes information on the Study and can be accessed via ***www.durhamyorkwaste.ca*** **.**
- A government agency and stakeholder contact list has been developed and notices as well as the Study documentation and other relevant information were sent to agencies regarding the Study, along with a request for feedback on future consultation needs.

1.5 Revisions to Short-List Since Original Announcement

Following issuance of the draft report identifying the Short-List of sites, two of the six sites were removed from consideration. Site Clarington 02 was removed from the Short-List as the land use designation for the property changed in late March 2007 such that the site no longer met Step 2 evaluation criteria. Site Clarington 03 was removed from the Short-List as the site was withdrawn from consideration by the private owner of the property, such that this site could no longer be considered a 'willing seller' property.

1.5.1 Removal of Site Clarington 02 from Short List of Alternative Sites

Figure 1-5 Short-List Site Removed – Clarington 02

As noted in Section 1.3.6 of this report, Clarington sites 01 and 02 were treated as a single site with two (2) parcels. as described in the *Draft Report – Thermal Facility Site Selection Process – Results of Steps 1-5 – Identification of the Short-List of Alternative Sites*, page 33, Section 7.4 [4]: Based on a more detailed review of sites Clarington 01 and Clarington 02, it was determined that these sites should be, for the purpose of evaluation of the Short-List of sites, be treated as a single site with two (2) parcels. These sites are very similar in size, location, ownership, natural features, and proximity to required infrastructure. Both sites, owned by the Region of Durham, are also directly adjacent to Regional property where the new Courtice Water Pollution Control Plant is being constructed and where potential infrastructure sharing could take place.

On February 14, 2007, Durham Regional Council approved Amendment No. 35 to the Regional Official Plan and changed the land use designation from Employment Area to Waterfront and

relocated the Municipal Service symbol "S" to the east side of Courtice Road[5]. Regional Council also resolved Deferral 32 to the Clarington Official Plan by approving the Waterfront Greenway designation and moving the utility symbol east of Courtice Road.

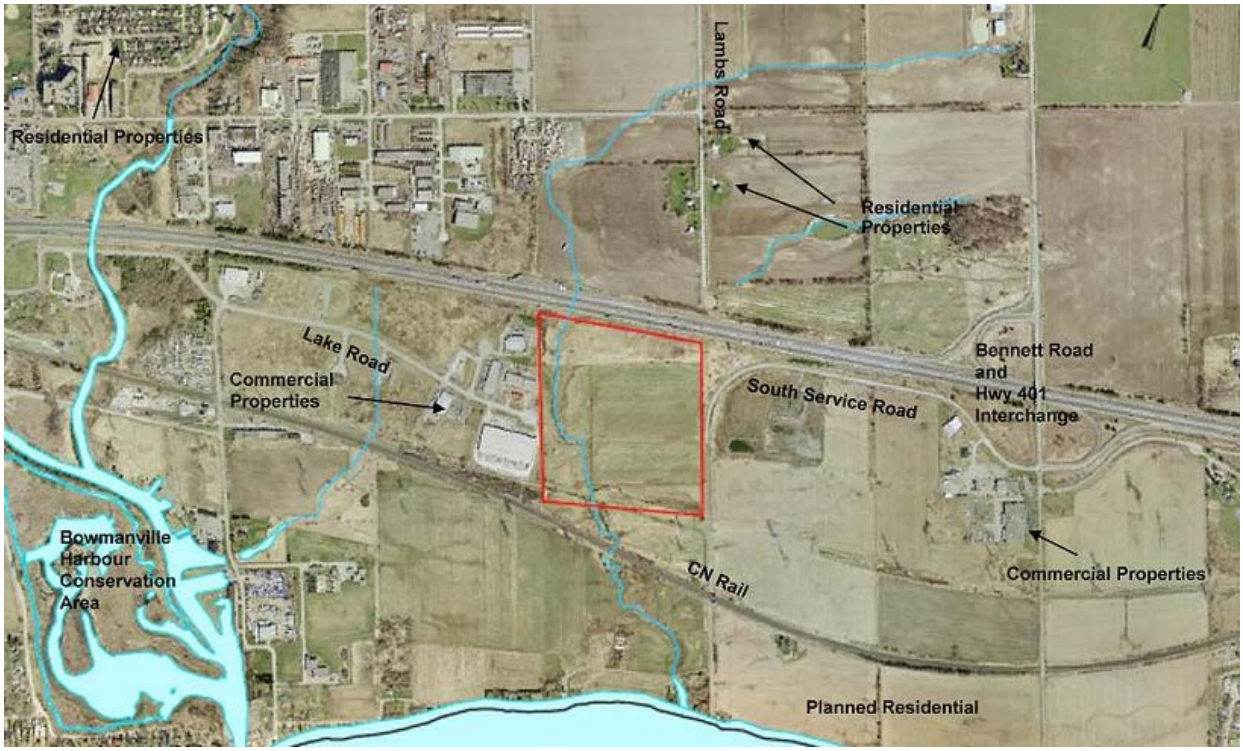
During the evaluation of Alternative Methods resulting in the identification of the Short-List of sites, the appeal period (as per the *Planning Act*) on this amendment was underway. Council's decision did not come into full force and effect until March 21, 2007.

As this amendment lifts the deferral on the land use designation (now confirmed as Waterfront Greenway in the Clarington Official Plan) for site Clarington 02, the site no longer met the Step 2 evaluation criteria and therefore, the site could no longer be considered for further evaluations and was removed from the Short-List of Alternatives Sites. Clarington 01 was not affected by this amendment and remained on the Short-List of Alternatives Sites as a separate site. A copy of the Council Resolution where by this change was adopted is included as Appendix B-1 of this report.

1.5.2 Removal of Clarington 03 Site from Short-List of Alternative Sites

Through the REOI process discussed in Section 1.3.4, Clarington 03 site (located at 641 Lambs Road in Clarington, Ontario) was offered for consideration by Cushman & Wakefield LePage Inc., the agent representing the owner (109629 Ontario Inc.).

Figure 1-6 Short-List Site Removed – Clarington 03



On April 27, 2007, the Clarington 03 site was withdrawn from the Short-List of Alternative sites, as per the email from John Morrison (Vice President, Cushman & Wakefield Lepage Inc.) to Chris Herriott (Durham Region Real Estate Department) included in Appendix B-2. The e-mail states:

> *"Upon further reflection, and taking into consideration competing sites and required timelines for providing a Right of First Refusal, we have decided not to proceed with our submission for our site to be considered for the proposed Thermal Facility Site."*

As a result, and in accordance with the Approved EA Terms of Reference, the owner of Clarington 03 can no longer be considered a willing seller and therefore, Clarington 03 was removed from the Short-List of Alternatives Sites.

1.6 Alignment of Siting Process and Competitive Process

As stated in Section 2.5.4 of the *Draft Report – Thermal Facility Site Selection Process – Results of Steps 1 – 5 – Identification of the Short-List of Alternative Sites, March 2007*:

> *"It was originally envisioned in the EA Terms of Reference (Step 6) that potential technology vendors would be provided the opportunity to submit a site along with their technology during the Request for Qualifications (RFQ) process. Under the advisement of procurement and legal counsel, it was determined that these two processes (submission of a site, and submission of technology qualifications) should be completed as two entirely separate processes. Completing these processes as part of the same competitive process could represent an unfair advantage to those vendors offering both a site and technology versus only those vendors providing a technology and thereby jeopardize the success of the competitive process.*
>
> *By "uncoupling" the RFQ and Request for Proposals (RFP) process from the siting process, it allowed for a more "fair" process to those involved and also allowed for the completion of siting activities in advance of a formal RFQ/RFP process for technology(ies). The siting component of Step 6 was addressed through the development of an REOI to potential technology vendors to provide the opportunity for this group to potentially offer up a site through a formal competitive process as described in the approved EA Terms of Reference."*

This adjustment to the sequence of the completion of certain events is permitted under Section 9 of the approved EA Terms of Reference which states:

> *"9. FLEXIBILITY IN APPLICATION OF THE TERMS OF REFERENCE*
> *In the course of implementing the work proposed in this Terms of Reference, Durham and York may determine that minor adjustments to the approaches and methodologies described herein are necessary and/or appropriate. Minor adjustments may include:*
>
> - *Provision and/or identification of additional information requirements;*
> - *Studies or consultation methods/events to address concerns expressed by the public as Study results become available; or,*
> - *Adjustments to the sequence of Study events which may be required depending on study results and circumstances.*
>
> *Where there is a likelihood that information or circumstances will change in the coming years as the EA is completed, this EA Terms of Reference makes reference to the intent or purpose of the consideration. Details with regards to the methods or steps to be followed to achieve the intent or purpose of the consideration are included in the background*

documentation that is not approved by the Minister. For example, data sources and specific indicators for the evaluation criteria are not included in the Terms of Reference but may be reviewed in the background documents if a party is interested in the types of considerations for application of the evaluation criteria.

Where minor adjustments are contemplated, such adjustments will be undertaken at the direction of the Durham-York Joint Waste Management Group, which functions as a steering committee for the Study, and in consultation with the MOE."

1.7 Purpose of this Report

This report has been prepared to present the results of the Step 7 of the evaluation of "Alternative Methods" which evaluates the Short-List of alternative sites resulting in the identification of a Recommended Preferred site. Detailed information on the process utilized to arrive at the Short-List of sites, please refer to the Draft Report entitled *"Thermal Facility Site Selection Process, Results of Steps 1-5, Identification of the Short-List of Alternative Sites, March 2007"*. The evaluation of "Alternatives Methods" is undertaken to identify a preferred location or site for the preferred "Alternative to" (ie., Technology).

This report is presented as a recommendation resulting from the study team's consideration of each site's advantages and disadvantages and the environmental priorities established by the communities of Durham and York. This Draft Report will be issued for further public and agency consultation prior to both Regional Councils making a decision with respect to the Recommended Preferred site.

1.8 Overview of Report Content

This report provides the relevant background and results of Step 7 of the facility siting process leading up to the identification and description of the Recommended Preferred location, identified by the Consultant team, for Durham and York Regions' proposed thermal treatment facility. The report has been structured such that, depending on the needs or interests of the reader, the entire process can be reviewed at varying levels of detail. The following are the key components comprising the remainder of this report:

Executive Summary

An executive summary has been prepared which presents the highlights and key findings of the evaluation process and which culminates with the presentation of next steps. The executive summary is included at the front of the report and has also been prepared as a separate document for wider distribution.

Main Report

The main report contains the detailed documentation of the process flowing from start to finish. It includes the following sections:

- **Section 1** provides relevant background and an overview of the report purpose, structure and content. This section also describes the results of Steps 1-5 of the evaluation of Alternative Methods and includes an updated Short-List of sites since the release of the

Draft Report on Thermal Facility Site Selection Process - Results of Steps 1-5 - Identification of the Short-List of Alternative Sites, March 2007.

- **Section 2** provides a description of each of the Short-List sites.
- **Section 3** describes the approach taken to evaluate the Short-List sites, including a detailed listing of the evaluation categories, criteria, indicators as well as the rationale for considering and applying each indicator. This section also includes a list of assumptions made during the evaluation process.
- **Section 4** provides tables which summarize the Short-List site advantages and disadvantages based on the application of evaluation criteria and indicators.
- **Section 5** describes the preferred site including a list of site specific advantages and disadvantages.
- **Section 6** describes the steps that subsequent to the release of this document for public and agency review and comment.

Also included with the main report are two appendices. Appendix A provides maps of the Short-List sites and surrounding areas. Appendix B provides additional background regarding the removal of site Clarington 02 and site Clarington 03 from the Short-List as discussed in Section 1.5.

Annexes

Under separate cover from the main report are a series of annexes, which are referenced throughout the discussion of the evaluation of the Short-List of sites. The annexes are reports which provide the detailed calculations, and rationale for the application of the criteria and indicators in the evaluation process.

Each of these annexes address one or more of the Short-List Evaluation Criteria as set out in Table 1.2.

Table 1.2 Comparative Evaluation Criteria to be used in the Evaluation of the Short-List of Alternative Sites and Applicable Annexes

Environmental Considerations	Evaluation Criteria	Applicable Annex
Public Health & Safety and Natural Environment Considerations	Potential Air Quality Impacts	Annex A - Report on Potential Air Quality Impacts
	Potential Water Quality Impacts (Surface Water and Groundwater)	Annex B- Report on Potential Water Quality Impacts (Surface Water and Groundwater)
	Potential Environmentally Sensitive Areas and Species Impacts	Annex C - Potential Environmentally Sensitive Areas and Species Impacts and Potential Aquatic and Terrestrial Ecology Impacts
	Potential Aquatic and Terrestrial Ecology Impacts	
Social and Cultural Considerations	Compatibility with Existing and/or Proposed Land Uses	Annex D - Report on Compatibility with Existing and/or Proposed Land Uses
	Potential Impact on Residential Areas	
	Potential Impact on Parks and Recreational Areas	

Table 1.2 Comparative Evaluation Criteria to be used in the Evaluation of the Short-List of Alternative Sites and Applicable Annexes

Environmental Considerations	Evaluation Criteria	Applicable Annex
	Potential Impact on Institutional Facilities or Areas	
	Potential Impact on Archaeological and Cultural Resources	Annex E - Report on Archaeological and Cultural Resources
	Potential Traffic Impacts	Annex F - Report on Potential Traffic Impacts
Economic / Financial Considerations	Operation and Maintenance Costs for Facility(ies)	Annex G - Report on Capital Costs, Operation and Maintenance Costs
	Capital Costs to develop Facility(ies)	
Technical Considerations	Compatibility with Existing Infrastructure	Annex H - Report on Compatibility with Existing Infrastructure and Design/Operational Flexibility
	Design/operational flexibility provided by site	
Legal Considerations	Complexity of Required Approvals	Annex I - Report on Complexity of Required Approvals and Agreements
	Complexity of Required Agreements	

Indicators have been identified for each of the above criteria and have been used to determine the advantages and disadvantages for each of the Short-List sites. Applicable indicators for the criteria addressed in this report are noted in Section 3.0.

Other Key Related Documentation Available

Other key related documents referred to in this report include:

- Approved Environmental Assessment Terms of Reference (March 31, 2006)
- Draft Report - Thermal Facility Site Selection Process - Results of Steps 1-5 Identification of the Short-List of Alternative Sites, March 2007.
- Report Results of Public and Agency Consultation on Proposed Facility Siting Methodology and Criteria Step 1 Report on Consultation, September 2006
- Summary Report and Record of Consultation on the Short-List of Alternative Sites, July 2007

2. The Short-List of Alternative Sites

The following provides a detailed description of each of the remaining four (4) alternative sites on the Short-List.

2.1 Short-List Site: Clarington 01

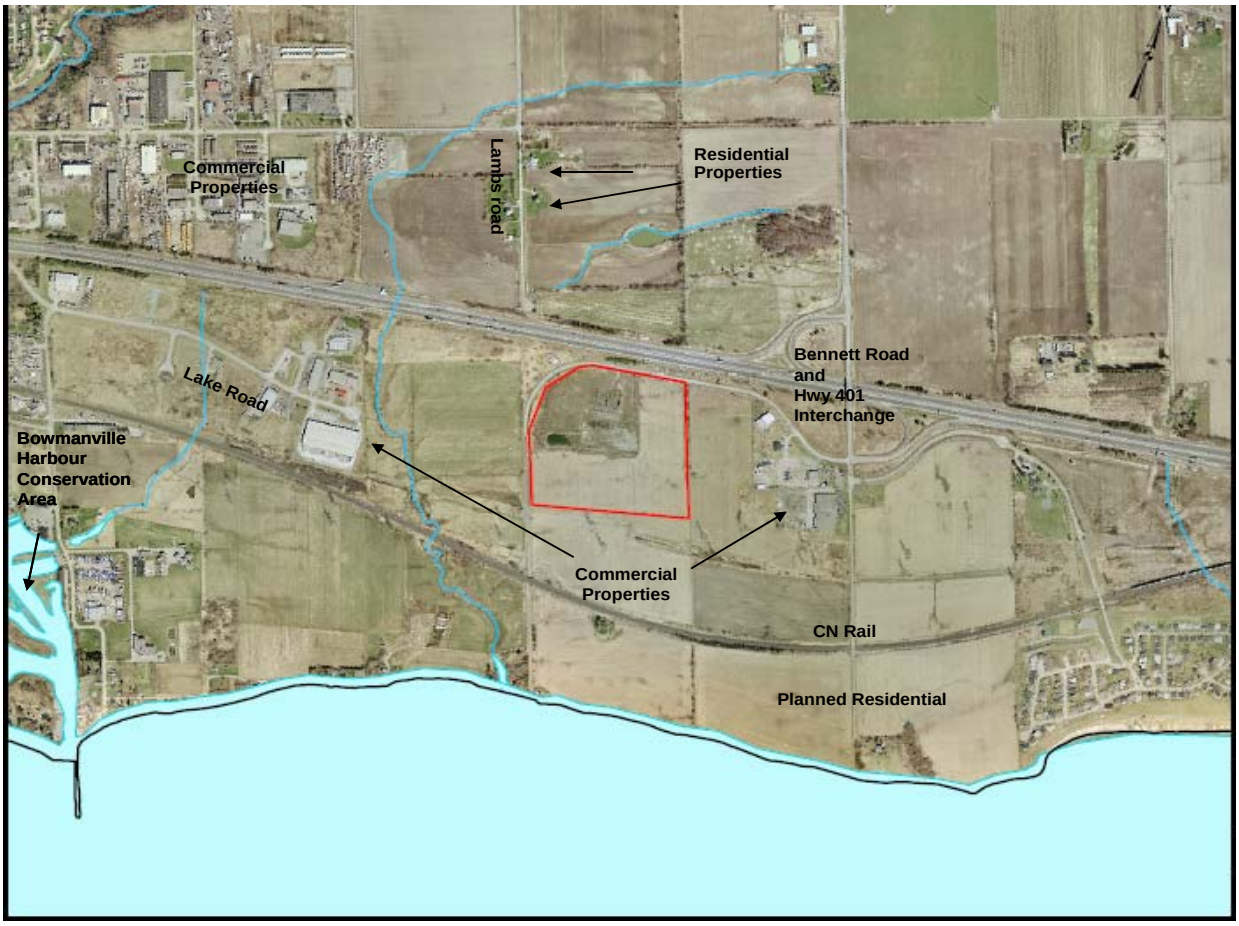
Site Clarington 01 is undeveloped land owned by the Region of Durham, located south of Highway 401 in the Municipality of Clarington. The site is located on the west side of Osbourne Road north of a CN Rail corridor. There are commercial properties north of the site. The lands east and west of the site are undeveloped and are currently used for agricultural purposes. The Courtice Water Pollution Control Plant, which is scheduled to be completed in 2007, is being built just south of the site. The Darlington Nuclear Generating Station is located approximately 0.5 kilometres to the east. The nearest major intersection is Highway 401 and Courtice Road, which is approximately 1.7 kilometres from the site. The site is approximately 12.4 hectares in area and is located in the Clarington Energy Park.

Figure 2-1 Short-List Site – Clarington 01

2.2 Short-List Site: Clarington 04

Site Clarington 04 is privately owned undeveloped land, located south of Highway 401 between Bennett Road and South Service Road, in the Municipality of Clarington. The lands east and west of the site are undeveloped and are currently used for agricultural purposes. A CN Rail corridor is located south of the site. There are commercial properties located on east and west, non-adjacent sides of the property. A number of residences and farms are located north of the property on the north side of Highway 401. The nearest major intersection is Highway 401 and Bennett Road, which is approximately 1.1 kilometres from the site. The site size is approximately 14.8 hectares.

Figure 2-2 Short-List Site – Clarington 04

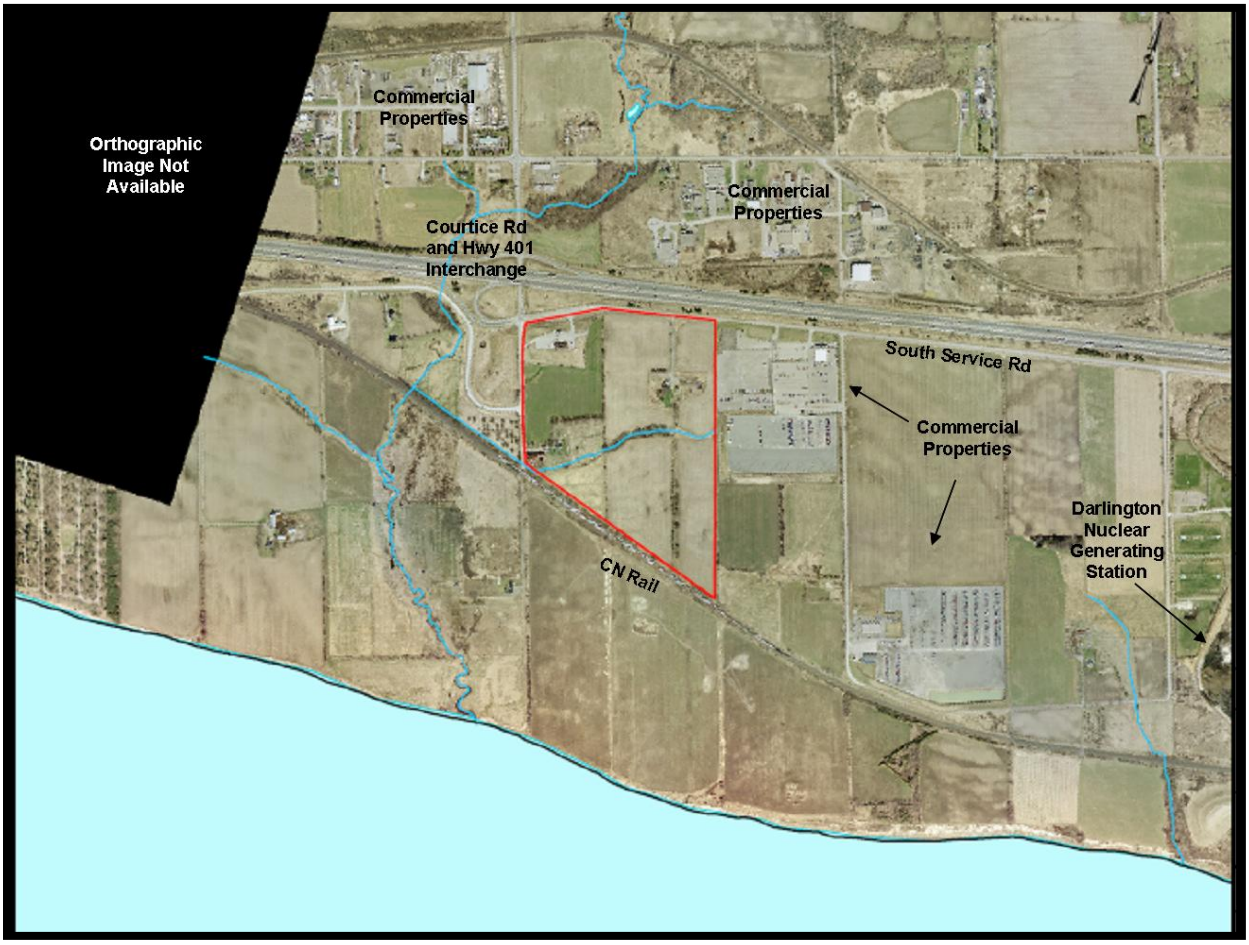


2.3 Short-List Site: Clarington 05

Site Clarington 05 is privately owned undeveloped land, located south of Highway 401 between Courtice Road and Osbourne Road, in the Municipality of Clarington. Commercial properties are located north of the site, north of Highway 401. A CN Rail corridor is located south of the site. The lands east and west of the site are undeveloped and are currently used for agricultural purposes. The nearest major intersection is Highway 401 and Courtice Road, which is

approximately 0.2 kilometres from the site. The site size is approximately 27.2 hectares. This site is located in the Clarington Energy Park.

Figure 2-3 Short-List Site – Clarington 05



2.4 Short-List Site: East Gwillimbury 01

Site East Gwillimbury 01 is owned by York Region and is located in the Town of East Gwillimbury, 2.6 kilometres from the nearest major intersection – Highway 404 and Davis Drive. The site is undeveloped land surrounded by commercial/ industrial properties to the west, east, and south. The York Region Waste Management Centre, which consists of a Materials Recycling Facility and Waste Transfer Station, is located immediately west of the site. York Region also owns the lands immediately east of the site. A Household Hazardous Waste and Recycling Depot, owned and operated by York Region, is situated south of the site. The land north of the site is undeveloped and is currently used for agricultural purposes. The site is approximately 11.5 hectares in size.

Figure 2-4 Short-List Site – East Gwillimbury 01

3. Step 7: Evaluation of the Short-List Sites

Following consultation on the Short-List of potential sites, a detailed comparative evaluation of the sites was initiated. This assessment considered the sites as well as the haul routes, transfer requirements and requirements for additional infrastructure to develop the sites.

3.1 Overview of the Approach to Preferred Site Identification

Step 7 entails a comparative evaluation of the identified sites utilizing criteria and indicators to measure potential effects. There are different methods (qualitative, quantitative or a combination of both) that can be used to evaluate the sites. There is no requirement to apply any specific methodology except that the process must be rational, traceable and replicable and must consider advantages and disadvantages based on a net effects analysis of alternatives. A qualitative methodology is commonly applied to address the approval requirements of the EAA and promotes the selection of siting preferences considering relative advantages and disadvantages based on net effects after the application of reasonably available mitigative measures.

The evaluation criteria applied at this Step were assembled under 5 categories:

1. Public Health and Safety and Natural Environment;
2. Social and Cultural;
3. Economic / Financial;
4. Technical Suitability; and
5. Legal.

Table 3.1 below provides a more detailed explanation of the evaluation categories, criteria, indicators as well as the rationale for considering and applying each indicator.

Table 3.1 Comparative Evaluation Criteria for the Evaluation of Short-List Sites

Criteria	Indicator	Rationale
Public Health & Safety and Natural Environment		
Air Quality Impacts *Note: The preferred technology must at least meet all applicable air quality regulations.*	Local meteorological conditions	Close proximity of the site to areas with sensitive meteorological conditions could result in negative impacts to the air environment. This indicator would take into consideration prevailing wind directions, existence of sensitive micro-climates, etc.
	Distance travelled from main source(s) of waste generation to the site.	Air impacts from transportation of waste along haul routes to the facility are related to the distance travelled from the area of waste generation to the waste processing site. Air impacts associated with the facility are addressed under other criteria related to sensitive uses (i.e., residential areas, institutions, etc.)
Water Quality Impacts (Surface Water and Groundwater)	Relative distance to and type of watercourses (aquatic habitat) present within close proximity of site for wastewater or surface water discharge from facility (if applicable).	Close proximity of site to sensitive watercourses could result in negative impacts to the aquatic environment due to potential discharges from the facility.
	Receiving body for wastewater discharge from the facility (if applicable)	Depending on the location and nature of the receiving body for wastewater discharge, negative impacts could result to the natural environment and/or social cultural environment due to potential discharges from the facility.
	Quality of water in the receiving body based on size and flow of watercourses.	Smaller watercourses with low flow could experience greater impacts from wastewater or surface water discharges from a facility.
Environmentally Sensitive Areas and Species Impacts	Species of special concern, threatened and/or endangered species identified by Ministry of Natural Resources (MNR) in the area potentially impacted by the site or haul route.	Proximity of site to sensitive environmental features could result in impacts during construction and operation of a facility and along the haul routes.

Table 3.1 Comparative Evaluation Criteria for the Evaluation of Short-List Sites

Criteria	Indicator	Rationale
	Distance from site or haul route to areas that are designated Natural Heritage Features and Areas including: Significant Wildlife and Fish Habitat; Significant Areas of Natural and Scientific Interest; Significant Wetlands, Woodlands, etc.; Designated Hazard Lands; and, Conservation Areas	Proximity of site to sensitive features could result in impacts during construction and operation of a facility and along the haul routes.
Aquatic and Terrestrial Ecology Impacts	Amount of woodlands, hedgerows, etc., affected or removed at the site and the degree of impact on the edge of a woodlot/hedgerow.	Negative impacts to the natural environment could result from removal of woodlands or hedgerows on a site, including edge impacts on a woodlot/hedgerow.
Social and Cultural Environment		
Criteria	**Indicator**	**Rationale**
Compatibility with Existing and/or Proposed Land Uses	Consistency with current land use, approved development plans, and proposed land use changes.	Fewer impacts to mitigate if current and future land use plans are consistent with a waste processing facility (i.e., avoid sites with an adjacent land use such as proposed residential development).
	Compatibility with existing land use designations.	Minimize impact on social environment with sites that are compatible with existing land use designations (i.e., industrial lands) and would not require re-zoning.
	Size of buffer zone available on the site.	Sites larger than the minimum site size would be easier to accommodate the facility (including design opportunities) and potential impacts could be mitigated with greater distance between the site and surrounding land uses.
	Opportunity for brownfield development.	Opportunity for beneficial use of existing brownfields, which means that undeveloped land, could be avoided and used for future uses of higher community value than a waste processing facility.
Residential Areas	Distance from site to designated residential areas within an appropriate separation distance of the site and within an appropriate separation distance of the haul route(s).	Greater distances between the facility and residential areas is preferred to reduce the potential impacts. Along the haul route determining the impacts from emissions and noise from transportation vehicles and the mitigation measures needed.
	Number and distribution of residences within an appropriate separation distance of the site and within an appropriate separation distance of the haul route(s).	Impacts on, and the need for, mitigation measures are reduced for sites that are located farther away from residents, so rural or lower density residential areas are preferred surrounding the site and along the haul route(s).

Table 3.1 Comparative Evaluation Criteria for the Evaluation of Short-List Sites

Criteria	Indicator	Rationale
Parks and Recreational Areas	Number and type of recreational areas (i.e., parkland) within an appropriate separation distance of the site and within an appropriate separation distance of the haul route(s).	Potential nuisance impacts (noise, odours and visual) may be detrimental to park and recreational areas and greater distances to the site would minimize potential impacts and the need for mitigation measures.
Institutional Facilities or Areas	Number and type of institutions within an appropriate separation distance of the site or area and within an appropriate separation distance of the haul route(s).	The type of institutions in close proximity should be considered to determine if the waste processing facility is an incompatible land use. If the institution(s) represents an incompatible land use, then a greater distance to the site would minimize potential impacts and the need for mitigation measures. There is also the potential that some institutional facilities could benefit from close proximity to a waste processing facility (i.e., university or hospital could utilize the facility for energy use or research/training).
Archaeological and Cultural Resources	Number and significance of known archaeological and cultural areas at the site based on review of documented sites and the potential for uncovered resources to be located at the site.	Cultural and archaeological resources are valuable, non-renewable and should be avoided since sites within known areas could result in disturbances during construction activities, as well consideration should be given to the potential for uncovered resources at the site based on the location and its amenities.
Traffic Impacts	Type of roadway (i.e., paved, gravel) and access to businesses and/or subdivisions & proximity of site to major arterial roads or highways.	Convenient access to the site will reduce impacts on traffic and to residents/commuters and would ease development of the site as a regional facility.
	Existing and projected volume of traffic along haul route (i.e., high, moderate or low).	Minimizing traffic impacts will improve community acceptance of the facility and haul routes. Generally, the higher the projected traffic volumes along the route, the lower the overall impact along the route and to the community. For example, a road that currently has a low volume of traffic (i.e., 100 vehicles per day), would experience a higher impact if traffic increased by 100 additional trucks per day. Conversely, a major road with thousands of vehicles travelling it daily would experience far less net impact.
	Conformity with Durham's Goods Movement Network	Specific to Durham Region, conformity with Durham's Goods Movement Network as outlined in its Transportation Master Plan (currently under review) will ensure that waste transfer vehicles are travelling road networks that have been identified for this type of traffic.
Economic / Financial		
Criteria	**Indicator**	**Rationale**

Table 3.1 Comparative Evaluation Criteria for the Evaluation of Short-List Sites

Criteria	Indicator	Rationale
Capital Costs	Site development costs, including: infrastructure required, upgrades to existing infrastructure (roads, sewers, etc.), property acquisition and possible site remediation.	Sites with lower development costs would be more economically feasible.
Operation and Maintenance Costs	Distance from waste generation points, transfer stations (e.g., length of haul route), annual operating costs and maintenance costs.	Impact of facility on Durham and York 's financial resources must be assessed and deemed affordable.
	Mitigation requirements	Anticipated costs with respect to the mitigation of potential impacts. (i.e., may include site development costs, site maintenance costs, etc).
	Monitoring requirements	Anticipated costs to maintain required monitoring programs. (i.e., sites closer to environmentally sensitive features in a rural environment may require additional monitoring efforts than sites located in a developed urban/industrial area.)
	Distance from potential markets for sale of marketable materials (ie. heat, electricity, recovered metals, etc.).	Sites that are closer to potential markets have the potential for reduced O&M costs.
Technical Considerations		
Criteria	**Indicator**	**Rationale**
Compatibility with Existing Infrastructure	Distance from required infrastructure (i.e., sewers, hydro, road access, water).	Construction may take additional time and extend beyond site location if site does not have existing access to required utilities.
Design/Operational Flexibility Provided by Site	Area surplus to minimum requirement provided by site.	Surplus lands will enhance the potential to design a facility capable of managing additional sources of residual wastes (e.g. IC&I wastes or other municipalities) or may be used to enhance the on-site buffer area.
Legal Considerations		
Complexity of Required Approvals	Nature of approvals required.	The need for complex approvals and possibly a public hearing present a legal risk to the successful implementation on a particular site. These risks should be considered in the selection of a Preferred site.
Complexity of Required Agreements	Nature of property acquisition (related to the need for expropriation, Region owned or willing seller site).	Sites that have fewer property acquisition issues associated with them would be less costly from the perspective of time and money. The order of preference based on property acquisition timing would be Region owned sites, willing seller sites and sites requiring expropriation.

This net effects analysis consists of the following steps:

1. Undertake data collection and apply the comparative evaluation criteria to each of the Short-List sites. Potential effects to the environment would be identified based on the application of the comparative evaluation criteria. The net effects analysis will initially be carried out based on secondary data sources (e.g., Official Plans, aerial photographs, existing base maps and limited field reconnaissance).
2. Consider measures that may be reasonably applied to mitigate potential effects identified in the previous step for each site. The result of this step will be the identification of net or post-mitigation effects for each of the sites.
3. Compare the net effects associated with each site and establish the relative advantages and disadvantages of each site. Under each criterion, sites would receive a ranking based comparison with the other sites, ranging as follows:

   - Major Advantage
   - Advantage
   - Neutral
   - Disadvantage
   - Major Disadvantage.

   The site that best meets the objective of the criterion would be identified as having a major advantage and the site that least meets the objective of the criterion would have a major disadvantage. It is not intended that specific ranges would be predetermined for the ranking; instead they will be developed based on a comparison between the potential sites. For this study, a qualitative evaluation methodology was applied that uses professional judgment of the Study/Consultant Team in the context of priorities set by the community.

It was determined that the application of advantages and disadvantages alone did not completely reflect the differences between sites in terms of the potential range of impacts associated with each of the sites. In order to overcome this issue and still maintain a qualitative approach to the evaluation, it was determined that the application of advantages and disadvantages would include: Major Advantages; Advantages; Neutral; Disadvantages; and, Major Disadvantages to better represent the significance of some of the impacts and therefore the potential significant differences between the Short-List sites.

Advantages and disadvantages were applied as follows:

Table 3.2 Summary of Short-List Sites Advantages and Disadvantages

Ranking	Description
MAJOR ADVANTAGE	**Description**: Development of the site would have minimal impact based on the criteria/indicator being applied and in most cases a net benefit would result from facility development **Example**: A site that would not require the development of additional infrastructure would be considered a major advantage when compared to a site that does require additional infrastructure development.
ADVANTAGE	**Description**: Development of the site would have manageable impact based on the

Table 3.2 Summary of Short-List Sites Advantages and Disadvantages

Ranking	Description
	criteria/indicator being applied and in most cases a net benefit would result from facility development **Example**: A site that would require the development of limited additional infrastructure would be considered an advantage when compared to a site that requires more significant additional infrastructure
NEUTRAL	**Description**: Development of the site would have no potential benefits or impacts based on the criteria/indicator being applied. **Example**: All sites being considered require a particular approval with the level of complexity in obtaining the approval is consistent for all sites.
DISADVANTAGE	**Description**: Development of the site would have some impacts based on the criteria/indicator being applied and may require some mitigative measures to reduce potential impact. **Example**: A site that would require the development of some additional infrastructure would be considered an disadvantage when compared to a site that requires less additional infrastructure
MAJOR DISADVANTAGE	**Description**: Development of the site would have a significant impact based on the criteria/indicator being applied and would require extensive mitigative measures to reduce potential impact. **Example**: A site that would require the development of significant additional infrastructure (ie., Sewer, water, roads, natural gas, etc.) that in themselves, may have potential negative environmental impact would be considered a major disadvantage when compared to a site that is already sufficiently serviced and does require additional infrastructure development.

4. The rankings will be recorded in a summary table and overall rankings for each of the five categories of criteria will be established based on the advantages and disadvantages of the sites. The Preferred site will be the one with the preferred balance of advantages and disadvantages relative to the established category priorities and rankings. This decision will be based on the priorities and professional judgment exercised by the Study Team and in consideration of the technical database, advice from technical experts and input received from stakeholders (e.g., public, neighbours, agencies, etc.).

Identification of the Preferred site involves the consideration of the site advantages and disadvantages. The comparison was undertaken using a methodology that compared each of the alternative Short-List sites, based on their relative advantages and disadvantages, for each of the five (5) categories of the environment. This comparison of advantages and disadvantages was completed at three-levels as follows:

- **Level 1**, which involved the comparison of all Short-List sites with respect to each of the indicators within a particular criterion of the environment (See Section 3.1 and Table 3-1). At this level, each system was assigned a relative Major Advantage, Advantage, Neutral (where the impact is neither an advantage nor a disadvantage), Disadvantage or Major Disadvantage;

- **Level 2**, which involved the summation of the advantages and disadvantages identified at Level 1 for each indicator within a particular criterion of the environment to determine the overall advantage or disadvantage of each site at the criteria level. (See Section 3.1 and Table 3-1). At this level, each site was assigned a relative Major Advantage,

Advantage, Neutral (where the impact is neither an advantage nor a disadvantage), Disadvantage or Major Disadvantage; and,

- **Level 3**, which involved the summation of the advantages and disadvantages identified for each criteria at Level 2 within a particular category of the environment to determine the overall advantage or disadvantage of each site at the category level. (See Section 3.1 and Table 3.1). At this level, each site was assigned a relative Major Advantage, Advantage, Neutral (where the impact is neither an advantage nor a disadvantage), Disadvantage or Major Disadvantage.

Supporting documentation for the application of each indicator and criteria of the potential environmental impact can be found in Annex A thru I of this document.

The purpose of this exercise was to give an indication of the relative strengths and weaknesses of the four (4) Short-List sites being evaluated. Accordingly, a site with a longer list of significant advantages or disadvantages under a particular category was considered to be an outlier (i.e. significantly advantaged or disadvantaged) in that regard whereas, a site with no or few advantages or disadvantages under a particular category was considered to reside somewhere in the midrange of effects for that consideration.

The intent of this exercise is to ensure that all alternatives are being reviewed in the context of best practices or best available technology – provided these measures are reasonably available and can be reasonably applied to the undertaking. The selection of the Preferred site will be subject to approval by both Regional Councils.

3.2 Application of a Site Advantages and Disadvantages Comparison Approach

3.2.1 Qualitative Approach Selected

A qualitative assessment approach was employed to consider and compare site advantages and disadvantages, identify trade-offs, and decide on preferences. Selection of a qualitative versus quantitative approach recognized the ability of the qualitative approach to focus on the provision of a descriptive rationale for certain choices and the consideration of priorities, and an ability of the broader public to understand the decision-making process. Although much of the analysis relies on the professional skills of the consultant team, staff and municipal authorities, to assemble the relevant information, it was recognized throughout the evaluation that all decisions and/or trade-offs would need to be clearly documented, defensible, and appropriately linked to the results of public and agency consultation.

Although it can be easier for reviewers, with appropriate training, to follow the results of a quantitative evaluation approach, this feature is outweighed by the respective drawbacks related to broader environmental assessment concerns. In particular, the need to document a process that is traceable to all potentially impacted or with concerns and not just those that with statistical analysis backgrounds. First, it should be noted that in developing and applying the methodology and respective data sets that much of the same professional skills used in qualitative approaches is required for quantitative approaches. The challenge tends to arise in translating that qualitative

information to data sets or numbers with defined limits representing the scope of a particular impact and further, in determining the numeric point at which different impacts are distinguished (e.g. high versus moderate versus low impact or significance).

Experience with complex quantitative approaches has shown that these processes often revert to a focus on numeric orders, magnitudes and equations that are usually difficult to link to advantages and disadvantages in terms that the general public can understand. Inevitably, these processes lead to debate among those with a background or qualifications in statistics or mathematics and these debates usually become narrowly focused on minute detail such as a percentage point up or down which may mathematically change the final conclusion. In doing so, these approaches present the risk of losing the human side of what 'makes sense' and is considered reasonable and understandable to the general public.

Experience has shown that a well documented and rational qualitative approach can overcome the above deficiencies associated with quantitative approaches and therefore was selected as the appropriate approach for use throughout the Durham/York Residual Waste Study.

3.2.2 Use of Priorities in Relative Comparison

The environmental priorities, representative of the Durham and York communities were established in order to guide the evaluation of the alternative sites and were derived from the following three activities:

- Two (2) workshop sessions with municipal representatives and various agencies were held on September 11 and 12, 2006. The purpose of these workshop sessions was to review siting methodology and criteria with key government agencies.
- A series of concurrent Public Information Sessions on 'Alternatives Methods' – Facility Siting Evaluation Methodology and Criteria were held on September 12, 13 and 14, 2006 in both Durham and York Regions. The purpose of these sessions was to present and receive comments on the information presented on: the evaluation of "Alternative Methods"(i.e., facility siting) including siting methodology, criteria and priority rankings, area screening, site size determination and comparative evaluation of sites as well as the proposed next steps in the Study. In order to obtain public input on the facility siting evaluation methodology and criteria, attendees were asked to complete a questionnaire. In the questionnaire the respondents were advised that the thermal treatment facility would not be sited in residential areas, agricultural areas and areas with important natural heritage value (like wetlands) and that a number of suitable locations will be identified and compared based on the potential for impacts to the natural environment, society, costs, technical and legal issues. In the comment sheet, respondents were asked for input on how they felt about the categories of potential impact and on how important they were in making the decision on where the waste management facility should be located. The respondents were then asked to rate each of these categories. In total Six (6) concurrent Public Information Sessions on the 'Alternatives Methods' – Facility Siting Evaluation Methodology and Criteria were held throughout Durham and York Regions as follows:

    - September 12th, 2006 - Municipality of Clarington and City of Vaughan
    - September 13th, 2006 - Town of Ajax and Town of Newmarket

- September 14th, 2006 - Port Perry and Town of Richmond Hill

- Ipsos Reid undertook an online survey in September, 2006 to determine broader public opinion on the conclusions regarding the proposed siting methodology and evaluation criteria. The firm conducted an online survey, and received responses from a target audience of 1005 residents in both Durham and York regions - a total of 412 Durham residents and 593 York residents. The sample was chosen in order to be representative of the population demographics of the two Regions. The format of the survey was similar to the Public Information Sessions questionnaire, and respondents were asked to rate the relative importance of the categories of potential impact with respect to the siting of the proposed thermal treatment facility. The key findings of the survey are presented below:

  - Almost all (96%) respondents feel that the natural environment/public health and safety is either extremely or very important in making the decision on where the waste management facility should be located;
  - Three quarters (74%) of respondents think that the social/cultural environment is extremely/very important in making waste management facility location decisions;
  - Three quarters (74%) of respondents think that the economic environment is extremely or very important in making decisions on locations for a waste management facility;
  - Nearly seven-in-ten (68%) respondents believe that technical issues are extremely/very important in deciding waste management locations; and
  - Just under six in ten (57%) respondents consider legal issues extremely/very important in making decisions on waste management facility locations;

The results of the above activities were combined in order to determine the overall relative importance of the environmental categories to be to be considered in the evaluation of "Alternatives Methods". These have translated to the assigned priorities presented in Table 3.3 below.

Table 3.3 Priorities Assigned to Evaluation Categories resulting from Public and Agency Consultation

Category	Priority
Public Health and Safety and Natural Environment Considerations	Most Important
Social and Cultural Considerations	Important
Economic/Financial Considerations	Important
Technical Considerations	Important
Legal Considerations	Least Important

3.3 Consideration of Potential Effects, Mitigation and Net Effects

The Short-List evaluation process involved a 'net effects analysis' of the four (4) Short-List siting alternatives. A 'net effects analysis', which is a requirement of the EAA, was identified in

the step-by-step methodology and included in the approved EA Terms of Reference. The methodology involves the following:

- First, the comparative evaluation criteria are applied to the alternatives and the range of potential effects resulting from this application are identified.
- Second, each potential effect is reviewed and a determination made as whether or not mitigative measures exist that could be applied to offset or eliminate the potential effect. In the case of a positive effect, enhancement measures may be considered to increase the benefit.
- Finally, the remaining, or 'net' effects are tabulated for consideration further in the evaluation process.

The intent of this exercise is to ensure that all alternatives are being reviewed in the context of best practices or best available technology – provided these measures are reasonably available and can be reasonably applied to the undertaking.

The results included in the tables 4.1 to 4.5 below incorporate the consideration of mitigation and therefore can be considered net effects for the purpose of identifying a Preferred site.

Step 7 of the evaluation process focused on the identification of relative advantages and disadvantages for each of the four (4) sites. These were identified based on the net effects for each site identified and a comparison of these net effects is intended to, in essence, establish a ranking of systems under each comparative consideration.

3.4 Assumptions Utilized in Short-List Evaluation Process

In order to undertake the comparative evaluation process without having specifically identified the preferred technology vendor, a number of assumptions were made with respect to the ultimate facility arrangement. The accuracy of these assumptions will be confirmed once a preferred vendor is identified, through the completion of a sensitivity analysis which compares the assumption to actual conditions/arrangements, whether it be a particular impact, etc. The assumptions used in the evaluation of the Short-List sites are considered to be conservative and based on the professional judgement and experience of the consultant team with input from several technology vendors where applicable.

3.4.1 Assumptions Common to all Environmental Considerations

Facility Size Assumptions

The proposed Durham/York thermal treatment facility is expected to manage approximately 150,000 tonnes per year (tpy) to 400,000 tpy of waste depending on a number of variables and considerations. The significant range in capacity is due to a number of factors including:

- Guarantee of waste quantities supplied by Durham and York Region;
- Exercising of other long-term waste management options, including alternative processing facilities, landfill, etc. by York Region; and,
- Potential waste supply from other neighbouring non-Greater Toronto Area (GTA) municipalities.

It is the intention of both Regions to build a facility of sufficient size to manage their residual waste management needs over the immediate and short-term planning period. However, both Regions recognize the potential need for additional capacity as a result of population growth and availability of external waste disposal contracts over the long-term planning period. Therefore, the initial plan is to build a facility in the range of 150,000 tpy to 250,000 tpy to satisfy the immediate and short-term need, but to seek EA approval for the larger 400,000 tpy facility, should this expansion be required within the planning period.

For the purpose of comparing alternative sites, two scenarios for the facility's annual tonnage were analyzed in detail: 150,000 and 250,000 tpy of waste. A qualitative analysis of a (maximum) scenario with an annual tonnage of 400,000 tpy was also undertaken representing potential waste quantities and future expansion towards the end of the planning period. At this point there are too many unknown factors to undertake a detailed evaluation of the 400,000 tpy scenario. As a result, should a 400,000 tpy facility be contemplated in the future, detailed studies would have to be undertaken to support any additional approvals that will be required.

Considering the evaluation described in this document is a relative comparison of sites, the difference in relative advantages and disadvantages between sites will be minimal whether the site is designed for 250,000 tpy or 400,000 tpy. The difference lies in the acceptability of the site to manage this additional quantity of waste which will be confirmed should an expansion to 400,000 tpy be necessary in the future.

Waste Supply Assumptions

Section 3.3 of the Approved EA Terms of Reference notes that:

> *"Similarly, over the course of the Study, it may become evident that opportunities exist to provide capacity beyond that required by Durham and York. This excess capacity could be used to benefit the proponents and the broader environment. Dewatered biosolids, along with residual MSW from neighbouring non-GTA municipalities that may provide disposal capacity for processing residues outside the study area, or additional residual [Industrial, Commercial and Institutional] IC&I wastes from Durham or York are examples of potential waste streams that could be managed by surplus capacity identified during the EA process."*

A number of neighbouring non-GTA municipalities have expressed interest in the potential for supplying residual Municipal Solid Waste (MSW) to a Durham/York facility. It is the intent of Durham and York Regions to develop memorandums of understanding (MOUs) with those municipalities that exhibit a serious interest in supplying residual MSW, such that these municipalities can be formally identified as Durham and York Regions proceed with the necessary approvals for the facility. Such MOUs would be replaced upon commissioning of a new Durham/York thermal treatment facility with formal waste supply agreements.

It is also possible that IC&I sources of waste may have an interest in supplying waste. Again, such arrangements would be formalized as they arise through agreements.

For the purpose of comparing alternative sites, two scenarios for the facility's annual tonnage were analyzed in detail: 150,000 and 250,000 tpy of waste. These scenarios include a range of waste supply opportunities as follows:

Scenario 1 - 150,000 tonnes/year

- 110,000 tonnes/year – Durham Region
- 20,000 tonnes/year – York Region
- 20,000 tonnes/year – Other Waste Sources

Scenario 2 - 250,000 tonnes/year

- 110,000 tonnes/year – Durham Region
- 120,000 tonnes/year – York Region
- 20,000 tonnes/year – Other Waste Sources

The primary difference between the scenarios is the waste supply from York Region. The 100,000 tonnes/year difference is a result of the potential for waste to be managed at the Dongara waste pelletizing facility. York Region currently has a contract to process 100,000 tonnes/year at this facility, however, facility construction is not complete and a market for the product is also under development. The Dongara contract ends in 2028 and York may chose to send its waste to the Durham/York facility at that time.

3.4.2 Assumptions Specific to Particular Environmental Considerations

Within each of the reports included in Annex A thru I, assumptions made in the identification of potential impacts, application of potential mitigative measures, and identification of net-effects have been identified and documented. These assumptions are specific to the indicator or criteria being applied. For instance, assumptions with respect the type of trucks and flow of truck traffic are identified in Annex F which documents the traffic impact assessment.

4. Summary of Short-List Site Relative Advantages and Disadvantages

The results of the comparative evaluation and identification of site advantages and disadvantages are summarized in Tables 4.1 to 4.5 below.

Table 4.1 Public Health and Safety and Natural Environmental Considerations - Application of Short-List Evaluation Criteria

Criterion	Indicator	Clarington 01	Clarington 04	Clarington 05	East Gwillimbury 01
Potential Air Quality Impacts *Note: The preferred technology must at least meet all applicable air quality regulations.*	Local meteorological conditions	DISADVANTAGE • Proximity to 400 series highway will influence local air quality • Potential air quality impact from intermediate distance industrial sources • Potential adverse impact from lake effect • Location specific air monitoring currently underway to confirm results	MAJOR DISADVANTAGE • Proximity to 400 series highway will influence local air quality • Greatest potential air quality impact from major intermediate distance industrial sources • Potential adverse impact from lake effect • Location specific air monitoring currently underway to confirm results	DISADVANTAGE • Proximity to 400 series highway will influence local air quality • Potential air quality impact from intermediate distance industrial sources • Potential adverse impact from lake effect • Location specific air monitoring currently underway to confirm results	NEUTRAL • Greater distance to nearest 400 series highway • Lowest industrial emissions from local and intermediate distance sources. • No potential adverse impact from lake effect • Location specific air monitoring currently underway to confirm results
	Distance travelled from main source(s) of waste generation to the site. (Measured as total kilometres travelled per day by collection and transfer vehicles (round-trip) from source of waste generation to facility and back)	ADVANTAGE • 150,000 tonnes/year scenario – 1,490 km/day • 250,000 tonnes/year scenario – 3,170 km/day	NEUTRAL • 150,000 tonnes/year scenario – 1,690 km/day • 250,000 tonnes/year scenario – 3,630 km/day	ADVANTAGE • 150,000 tonnes/year scenario – 1,490 km/day • 250,000 tonnes/year scenario – 3,170 km/day	DISADVANTAGE • 150,000 tonnes/year scenario – 3,380 km/day • 250,000 tonnes/year scenario – 4,470 km/day
	OVERALL:	NEUTRAL (disadvantage associated with local and intermediate conditions offset by shorter haul distance)	DISADVANTAGE (major disadvantage associated with local and intermediate conditions partially offset by shorter haul distance)	NEUTRAL (disadvantage associated with local and intermediate conditions offset by shorter haul distance)	NEUTRAL (disadvantage associated with longer haul distance partially offset by local and intermediate conditions)

Table 4.1 Public Health and Safety and Natural Environmental Considerations - Application of Short-List Evaluation Criteria

Criterion	Indicator	Clarington 01	Clarington 04	Clarington 05	East Gwillimbury 01
Water Quality Impacts (Surface Water and Groundwater)	Relative distance to and type of watercourses (aquatic habitat) present within close proximity of site for wastewater of surface discharge from facility (if applicable).	ADVANTAGE • 600 metres to receiving watercourse • receiving watercourse is a cold water fishery • Stormwater management facility will be designed in accordance with Conservation Authority requirements to mitigate potential impacts to the receiving watercourse	NEUTRAL • 150 metres to receiving watercourse • receiving watercourse is a less sensitive warm water fishery • Stormwater management facility will be designed in accordance with Conservation Authority requirements to mitigate potential impacts to the receiving watercourse	NEUTRAL • 250 metres to receiving watercourse • receiving watercourse is a cold water fishery • Stormwater management facility will be designed in accordance with Conservation Authority requirements to mitigate potential impacts to the receiving watercourse	DISADVANTAGE • 15 metres to receiving watercourse • receiving watercourse is a cold water fishery • Stormwater management facility will be designed in accordance with Conservation Authority requirements to mitigate potential impacts to the receiving watercourse
	Receiving body for wastewater discharge from the facility (if applicable)	NEUTRAL • Wastewater discharge to be managed at a WPCP and ultimately discharged to lake Ontario in accordance with regulatory requirements	NEUTRAL • Wastewater discharge to be managed at a WPCP and ultimately discharged to lake Ontario in accordance with regulatory requirements	NEUTRAL • Wastewater discharge to be managed at a WPCP and ultimately discharged to lake Ontario in accordance with regulatory requirements	NEUTRAL • Wastewater discharge to be managed at a WPCP and ultimately discharged to lake Ontario in accordance with regulatory requirements

Table 4.1 Public Health and Safety and Natural Environmental Considerations - Application of Short-List Evaluation Criteria

Criterion	Indicator	Clarington 01	Clarington 04	Clarington 05	East Gwillimbury 01
	Quality of water in the receiving body based on size and flow of watercourses	NEUTRAL • The stormwater management facility will be controlled from post-development to pre-development (existing) conditions	NEUTRAL • The stormwater management facility will be controlled from post-development to peak pre-development (existing) conditions	NEUTRAL • The stormwater management facility will be controlled from post-development to pre-development (existing) conditions	NEUTRAL • The stormwater management facility will be controlled from post-development to pre-development (existing) conditions
	Groundwater Impacts (not specified indicator, provided for information)	NEUTRAL • Development of thermal treatment facility will not have any noticeable effects on the surrounding groundwater resources	NEUTRAL • Development of thermal treatment facility will not have any noticeable effects on the surrounding groundwater resources	NEUTRAL • Development of thermal treatment facility will not have any noticeable effects on the surrounding groundwater resources	NEUTRAL • Development of thermal treatment facility will not have any noticeable effects on the surrounding groundwater resources
	OVERALL	ADVANTAGE (600 metres to receiving watercourse, receiving watercourse is a cold water fishery)	NEUTRAL (150 metres to receiving watercourse, receiving watercourse is a less sensitive warm water fishery)	NEUTRAL (250 metres to receiving watercourse, receiving watercourse is a cold water fishery)	DISADVANTAGE (15 metres to receiving watercourse, receiving watercourse is a cold water fishery)
Environmentally Sensitive Areas and Species Impacts	Species of special concern, threatened and/or endangered species identified by Ministry of Natural Resources (MNR) in the area potentially impacted by the site or haul route.	DISADVANTAGE • 2 - Species of Conservation Concern documented by the NHIC as possibly occurring in the vicinity of the site • 0 - Species of Conservation Concern Observed On-Site	ADVANTAGE • 0 - Species of Conservation Concern documented by the NHIC as possibly occurring in the vicinity of the site • 0 - Species of Conservation Concern Observed On-Site	DISADVANTAGE • 1 - Species of Conservation Concern documented by the NHIC as possibly occurring in the vicinity of the site • 0 - Species of Conservation Concern Observed On-Site	DISADVANTAGE • 1 - Species of Conservation Concern documented by the NHIC as possibly occurring in the vicinity of the site • 0 - Species of Conservation Concern Observed On-Site

Table 4.1 Public Health and Safety and Natural Environmental Considerations - Application of Short-List Evaluation Criteria

Criterion	Indicator	Clarington 01	Clarington 04	Clarington 05	East Gwillimbury 01
	Distance from site or haul route to areas that are designated Natural Heritage Features and Areas including: Significant Wildlife and Fish Habitat; Significant Areas of Natural and Scientific Interest; Significant Wetlands, Woodlands, etc.; Designated Hazard Lands; and, Conservation Areas	ADVANTAGE • 20 Natural Areas within 10 km • 1.3km to Closest Natural Area • No Hazard Lands On-Site	ADVANTAGE • 19 Natural Areas within 10 km • 1.4km to Closest Natural Area • No Hazard Lands On-Site	DISADVANTAGE • 20 Natural Areas within 10 km • 1.3km to Closest Natural Area • Hazard Lands On-Site	DISADVANTAGE • 35 Natural Areas within 10 km • 1.8km to Closest Natural Area • Floodplain On-site
	OVERALL:	NEUTRAL (disadvantage associated with species of special concern offset by distance to natural areas and lack of on-site hazard lands)	ADVANTAGE	DISADVANTAGE	DISADVANTAGE
Aquatic and Terrestrial Ecology Impacts	Amount of woodlands, hedgerows, etc., affected or removed at the site and the degree of impact on the edge of a woodlot/hedgerow.	ADVANTAGE • No Wooded Areas Present On-Site • Minimal Hedgerows Present On-Site • No Aquatic Habitat on-site	DISADVANTAGE • No Wooded Areas Present On-Site • No Hedgerows Present On-Site • Potential Aquatic Habitat on-site	MAJOR DISADVANTAGE • Wooded Areas Present On-Site • Hedgerows Present On-Site • Potential Aquatic Habitat on-site	DISADVANTAGE • No Wooded Areas Present On-Site • No Hedgerows Present On-Site • Potential Aquatic Habitat on-site
	OVERALL:	ADVANTAGE	DISADVANTAGE	MAJOR DISADVANTAGE	DISADVANTAGE
OVERALL EVALUATION: PUBLIC HEALTH AND SAFETY AND NATURAL ENVIRONMENTAL CONSIDERATIONS		ADVANTAGE	NEUTRAL	MAJOR DISADVANTAGE	DISADVANTAGE

Table 4.2 Social and Cultural Considerations - Application of Short-List Evaluation Criteria

Criterion	Indicator	Clarington 01	Clarington 04	Clarington 05	East Gwillimbury 01
Compatibility with Existing and/or Proposed Land Uses	Consistency with current land use, approved development plans, and proposed land use changes.	MAJOR ADVANTAGE • Site is currently undeveloped with portions being utilized as agricultural land • Proposed facility considered to be public infrastructure and therefore is permitted in any Regional and Area Municipal Official Plan land use designation or local zoning by-law.	DISADVANTAGE • Site is currently undeveloped with portions being utilized as agricultural land. • Proposed facility considered to be public infrastructure and therefore is permitted in any Regional and Area Municipal Official Plan land use designation or local zoning by-law. • Potential impact to Northwest corner of property due to future development plans related to the expansion of Highway 401 and potential relocation of Bennett Road Interchange to Lambs Road.	MAJOR DISADVANTAGE • Site is currently undeveloped with portions being utilized as agricultural land, commercial land and residential. • Proposed facility considered to be public infrastructure and therefore is permitted in any Regional and Area Municipal Official Plan land use designation or local zoning by-law. • Highway 407 East extension (East Durham link) and the potential expansion of Highway 401 impacts the ability to develop approximately one third of the north portion of the site.	DISADVANTAGE • Site is currently undeveloped and vacant. • Regional Official Plan amendment maybe required due to Waste Management Policies 6.8.2 and 6.8.3 • No Area Municipal Official Plan or zoning by-law amendments required. • Site currently located in Greenbelt Area, although not constrained by development requirements within Greenbelt Plan.
	Size of buffer zone available on the site.	ADVANTAGE • Total site area – 12.4 hectares • Building size – 3.1 hectares • Net buffer area – 9.3 hectares	ADVANTAGE • Total site area – 14.8 hectares • Building size – 3.1 hectares • Net buffer area – 11.7 hectares	MAJOR ADVANTAGE • Total site area – 27.2 hectares • Building size – 3.1 hectares • Net buffer area – 24.1 hectares	ADVANTAGE • Total site area – 11.5 hectares • Building size – 3.1 hectares • Net buffer area – 7.4 hectares

Table 4.2 Social and Cultural Considerations - Application of Short-List Evaluation Criteria

Criterion	Indicator	Clarington 01	Clarington 04	Clarington 05	East Gwillimbury 01
	Opportunity for brownfield development.	NEUTRAL • Site not considered Brownfield property	NEUTRAL • Site not considered Brownfield property	NEUTRAL • Site not considered Brownfield property	NEUTRAL • Site not considered Brownfield property
	OVERALL:	MAJOR ADVANTAGE (Site is compatible with surrounding land uses and provides ample on-site buffer area)	DISADVANTAGE (Expansion of Highway 401 and potential relocation of Bennett Road Interchange to Lambs Road will impact developable area of site)	DISADVANTAGE (Highway 407 East extension (East Durham link) and the potential expansion of Highway 401 impacts the ability to develop approximately one third of the north portion of the site)	NEUTRAL (Potential Regional Official Plan amendment addressed under Legal considerations. Site not constrained by development requirements within Greenbelt Plan)
Residential Areas	Distance from site to designated residential areas within an appropriate separation distance of the site and within an appropriate separation distance of the haul route(s).	ADVANTAGE • The nearest residential area designated as future urban residential is 3.2 kilometres from site.	MAJOR DISADVANTAGE • The nearest urban residential area designated is 420 metres from site (Wilmot Creek planned expansion).	ADVANTAGE • The nearest residential area designated as future urban residential is 2.74 kilometres from site.	NEUTRAL • The nearest estate residential area is 875 metres from site.

Table 4.2 Social and Cultural Considerations - Application of Short-List Evaluation Criteria

Criterion	Indicator	Clarington 01	Clarington 04	Clarington 05	East Gwillimbury 01
	Number and distribution of residences within an appropriate separation distance of the site and within an appropriate separation distance of the haul route(s).	ADVANTAGE • Total of two (2) residences. • Two (2) are located northwest of property (one of which is abandoned) and one (1) is located to the east. • One (1) abandoned residence located 180 metres south of south service road on proposed haul route	DISADVANTAGE • Total of nine (9) residences. • Six (6) are located south of the site (south of CN Rail) and three (3) are located north of the site (north of Highway 401). • No residences located along proposed haul route	DISADVANTAGE • Total of nine (9) residences. • Seven (7) residences are located north of site (north of Highway 401) and one (1) is located southwest of site. Two (2) are located on site, one (1) of which is abandoned. • No residences located along proposed haul route	MAJOR DISADVANTAGE • Total of Nine (9) residences distributed on the north western, eastern and southern parts of the one (1) kilometre radius circle. • Four (4) of the residences on the east form part of a larger subdivision along Callwood Crescent, which is located 875 metres from site • Two (2) residences along proposed haul route on Davis Drive.
	OVERALL:	ADVANTAGE	MAJOR DISADVANTAGE (Wilmot Creek planned expansion directly to south will be dense subdivision development)	NEUTRAL (Distance to nearest designated residential area is offset by number of residences within 1 kilometre of site)	DISADVANTAGE (Designated residential area and residences within 1 kilometre of site and 2 residences along proposed haul route)
Parks and Recreational Areas	Number and type of recreational areas (i.e., parkland) within an appropriate separation distance of the site and within an appropriate separation distance of the haul route(s).	NEUTRAL • 1 kilometre to nearest park facility (Soccer fields in Darlington Buffer lands) • There are no recreational areas along haul route.	ADVANTAGE • There are no parks and recreational areas within the one (1) kilometre radius. • There are no recreational areas along haul route.	ADVANTAGE • There are no parks and recreational areas within the one (1) kilometre radius. • There are no recreational areas along haul route.	ADVANTAGE • There are no parks and recreational areas within the one (1) kilometre radius. • There are no recreational areas along haul route.

Table 4.2 Social and Cultural Considerations - Application of Short-List Evaluation Criteria

Criterion	Indicator	Clarington 01	Clarington 04	Clarington 05	East Gwillimbury 01
	OVERALL:	NEUTRAL	ADVANTAGE	ADVANTAGE	ADVANTAGE
Institutional Facilities or Areas	Number and type of institutions within an appropriate separation distance of the site or area and within an appropriate separation distance of the haul route(s).	ADVANTAGE • No institutional facilities within1kilometre radius of site. • No institutional facilities along proposed haul route.	ADVANTAGE • No institutional facilities within1kilometre radius of site. • No institutional facilities along proposed haul route.	ADVANTAGE • No institutional facilities within1kilometre radius of site. • No institutional facilities along proposed haul route.	ADVANTAGE • No institutional facilities within1kilometre radius of site. • No institutional facilities along proposed haul route.
	OVERALL:	ADVANTAGE	ADVANTAGE	ADVANTAGE	ADVANTAGE
Archaeological and Cultural Resources	Number and significance of known archaeological and cultural areas at the site based on review of documented sites and the potential for uncovered resources to be located at the site.	DISADVANTAGE • Site has a high potential for the presence of prehistoric archaeological resources. • Site has a high potential for the presence of historic period archaeological resources.	ADVANTAGE • Site has a high potential for the presence of prehistoric archaeological resources. • Site has a low potential for the presence of historic period archaeological resources.	MAJOR DISADVANTAGE • Site has a high potential for the presence of prehistoric archaeological resources. • Site has a high potential for the presence of historic period archaeological resources. • Abandoned house on-site is considered a historic resource which predates 1878.	NEUTRAL • Site has a high potential for the presence of prehistoric archaeological resources. • Site has a low to moderate potential for the presence of historic period archaeological resources on site.
	OVERALL:	DISADVANTAGE (site has high potential for both prehistoric and historic resources)	ADVANTAGE (high potential for prehistoric resources is more than offset by low potential for historic resources)	MAJOR DISADVANTAGE (site has high potential for prehistoric resources and historic resource on-site)	NEUTRAL (high potential for prehistoric resources is partially offset by low to moderate potential for historic resources)

Table 4.2 Social and Cultural Considerations - Application of Short-List Evaluation Criteria

Criterion	Indicator	Clarington 01	Clarington 04	Clarington 05	East Gwillimbury 01
Potential Traffic Impacts	Type of roadway (i.e., paved, gravel) and access to businesses and/or subdivisions & proximity of site to major arterial roads or highways.	NEUTRAL • Majority of haul route on 400 series highway • Paved municipal roadway to point of access for site • Haul Route length from 400 series highway – 1.2 km	DISADVANTAGE • Majority of haul route on 400 series highway • Paved municipal roadway to point of access for site • Haul Route length from 400 series highway – 0.5 km • Unknown whether potential new 401 interchange would provide direct access to site	NEUTRAL • Majority of haul route on 400 series highway • Paved municipal roadway to point of access for site • Haul Route length from 400 series highway – 0.4 km	NEUTRAL • Majority of haul route on 400 series highway • Paved municipal roadway to point of access for site • Haul Route length from 400 series highway – 2.0 km

Table 4.2 Social and Cultural Considerations - Application of Short-List Evaluation Criteria

Criterion	Indicator	Clarington 01	Clarington 04	Clarington 05	East Gwillimbury 01
	Existing and projected volume of traffic along haul route (i.e., high, moderate or low).	NEUTRAL • Good existing traffic conditions • Site can generally accommodate future facility without improvements to the study area intersections • Future Traffic analysis including thermal facility identified 1 Critical Movement affecting general vehicle travel: Eastbound left turn at Hwy 401 exit ramp and Courtice Road.	NEUTRAL • Good existing traffic conditions • Site can generally accommodate future facility without improvements to the study area intersections • Future Traffic analysis indicates no Critical Movements	NEUTRAL • Good existing traffic conditions • Site can generally accommodate future facility without improvements to the study area intersections • Future Traffic analysis including thermal facility identified 1 Critical Movement affecting general vehicle travel: Eastbound left turn at Hwy 401 exit ramp and Courtice Road.	DISADVANTAGE • Good existing traffic conditions except intersection of Bales/Davis Drive • Site can generally accommodate future facility without improvements to the study area intersections • Future Traffic analysis including thermal facility identified 2 Critical Movements affecting waste truck travel: Southbound left turn from Bales Drive onto Davis Drive and Westbound left turn from Garfield Wright Boulevard onto southbound Woodbine Avenue.
	Conformity with Durham's Goods Movement Network	NEUTRAL • Conforms with Durham's Goods Movement Network	NEUTRAL • Conforms with Durham's Goods Movement Network	NEUTRAL • Conforms with Durham's Goods Movement Network	NEUTRAL • Not applicable to York Region

Table 4.2 Social and Cultural Considerations - Application of Short-List Evaluation Criteria

Criterion	Indicator	Clarington 01	Clarington 04	Clarington 05	East Gwillimbury 01
	OVERALL	NEUTRAL	DISADVANTAGE (unknown whether potential new 401 interchange would provide direct access to site)	NEUTRAL	DISADVANTAGE (existing conditions intersection of Bales/Davis Drive, future traffic analysis indicates 2 Critical Movements)
OVERALL EVALUATION: SOCIAL AND CULTURAL CONSIDERATIONS		ADVANTAGE	DISADVANTAGE	DISADVANTAGE	NEUTRAL

Table 4.3 Economic/Financial Considerations - Application of Short-List Evaluation Criteria

Criterion	Indicator	Clarington 01	Clarington 04	Clarington 05	East Gwillimbury 01
Capital Costs	Site development costs, including: infrastructure required, upgrades to existing infrastructure (roads, sewers, etc.), property acquisition and possible site remediation.	NEUTRAL • Site-specific capital costs range from $7.6 to $11.3 million	DISADVANTAGE • Site-specific capital costs range from $8.9 to $16.7 million	DISADVANTAGE • Site-specific capital costs range from $10.6 to $15.5 million	ADVANTAGE • Site-specific capital costs range from $3.8 to $11.4 million
	OVERALL	NEUTRAL	DISADVANTAGE	DISADVANTAGE	ADVANTAGE
Operation and Maintenance Costs	Distance from waste generation points, transfer stations (e.g., length of haul route), annual operating costs and maintenance costs.	ADVANTAGE • Annual haul cost savings of $2.72 to $3.92 million	ADVANTAGE • Annual haul cost savings of $2.68 to $3.79 million	ADVANTAGE • Annual haul cost savings of $2.72 to $3.92 million	NEUTRAL • Annual Haul cost savings of $2.18 to $3.85 million
	Mitigation requirements	NEUTRAL • No site-specific mitigation requirements identified	NEUTRAL • No site-specific mitigation requirements identified	NEUTRAL • No site-specific mitigation requirements identified	NEUTRAL • No site-specific mitigation requirements identified
	Monitoring requirements	NEUTRAL • No site-specific monitoring requirements identified	NEUTRAL • No site-specific monitoring requirements identified	NEUTRAL • No site-specific monitoring requirements identified	NEUTRAL • No site-specific monitoring requirements identified

Table 4.3 Economic/Financial Considerations - Application of Short-List Evaluation Criteria

Criterion	Indicator	Clarington 01	Clarington 04	Clarington 05	East Gwillimbury 01
	Distance from potential markets for sale of marketable materials (i.e. heat, electricity, recovered metals, etc.).	ADVANTAGE • Comparable to other sites in distance to electricity and recyclables markets • Close to potential market for heat	DISADVANTAGE • Comparable to other sites in distance to electricity and recyclables markets • Limited potential market for heat	ADVANTAGE • Comparable to other sites in distance to electricity and recyclables markets • Close to potential market for heat	DISADVANTAGE • Comparable to other sites in distance to electricity and recyclables markets • Limited potential market for heat
	OVERALL	ADVANTAGE (advantages associated with haul cost savings and proximity to market for heat)	NEUTRAL (advantage associated with haul cost savings offset by limited market for heat)	ADVANTAGE (advantages associated with haul cost savings and proximity to market for heat)	DISADVANTAGE (no advantages to offset disadvantage related to limited market for heat)
OVERALL EVALUATION: ECONOMIC/FINANCIAL CONSIDERATIONS		ADVANTAGE	DISADVANTAGE	NEUTRAL	NEUTRAL

Table 4.4 Technical Considerations - Application of Short-List Evaluation Criteria

Criterion	Indicator	Clarington 01	Clarington 04	Clarington 05	East Gwillimbury 01
Compatibility with Existing Infrastructure	Distance from Required Infrastructure (i.e. sewers, hydro, road access, water) • Electrical Grid Connection	Disadvantage • Electrical grid connection along one side of site • Potential capacity constraints may require new transmission line to Wilson transformer station	Disadvantage • Electrical grid connection along one side of site • Potential capacity constraints may require new transmission line to Wilson transformer station	Disadvantage • Electrical grid connection along two sides of site • Potential capacity constraints may require new transmission line to Wilson transformer station	Advantage • Electrical grid connection along one side of site

Table 4.4 Technical Considerations - Application of Short-List Evaluation Criteria

Criterion	Indicator	Clarington 01	Clarington 04	Clarington 05	East Gwillimbury 01
	• Water Connection	Disadvantage • Secondary connection required • Requires 4,000 m of 300 mm pipe	Disadvantage • Secondary connection required • Requires 2,000 m of 400 mm pipe • Requires crossing Highway 401	Disadvantage • Secondary connection required • Requires 4,500 m of 400 mm pipe	Advantage • No secondary connection required • Requires only 50 m of 300 mm pipe
	• Sewer Connection	Advantage • Potentially requires 300 m of 450 mm gravity sewer	Disadvantage • Potentially requires 2,500 m of 450 mm gravity sewer • Potentially requires rail crossing and a watercourse crossing	Disadvantage • Potentially requires 1,300 m of 450 mm gravity sewer	Major Disadvantage • Potentially requires 7,000 m of 300 mm force main • Potentially pumping station and force main required, crossing Highway 404, plus several watercourse crossings
	• Natural Gas Connection	Disadvantage • 3 km of 200 mm (8”) pipe • Requires crossing Highway 401 and several small water courses	Disadvantage • 4 km of 150 mm (6”) pipe • Requires crossing Highway 401 and several small water courses	Disadvantage • 2.6 km of 200 mm (8”) pipe • Requires crossing Highway 401 and several small water courses	Advantage • Existing 100 mm (4”) pipe at site
	• Road Access	Disadvantage • Good access from highway 401 • 1,200 m of access road requires upgrading	Disadvantage • Good access from highway 401 • 500 m of access road requires upgrading	Disadvantage • Good access from highway 401 • 400 m of access road requires upgrading	Advantage • Good access from highway 404 • No road upgrades required

Table 4.4 Technical Considerations - Application of Short-List Evaluation Criteria

Criterion	Indicator	Clarington 01	Clarington 04	Clarington 05	East Gwillimbury 01
	• Heat Loads	Major Advantage • Courtice WPCP can use some of available heat load • Sufficient biogas from WPCP to generate electricity cost effectively • District heating could be provided to adjacent Energy Park	Disadvantage • Less viable for Port Darlington WPCP to use available heat load • Insufficient Biogas from WPCP to generate electricity cost effectively • Limited potential for use of heat energy in adjacent areas	Major Advantage • Courtice WPCP can use some of available heat load • Sufficient biogas from WPCP to generate electricity cost effectively • District heating could be provided to adjacent Energy Park	Disadvantage • Limited potential for use of heat in adjacent areas/buildings
	• Synergy with Municipal Infrastructure	Major Advantage • Potential to thermally treat dewatered biosolids from Courtice WPCP • Some synergy with Courtice WPCP due to proximity and size of WPCP • Potential to share major infrastructure with Energy Park	Advantage • Potential to thermally treat dewatered biosolids from Port Darlington WPCP • Little synergy with Port Darlington WPCP, greater distance and smaller WPCP	Major Advantage • Potential to thermally treat dewatered biosolids from Courtice WPCP • Some synergy with Courtice WPCP due to proximity and size of WPCP • Potential to share major infrastructure with Energy Park	Advantage • Potential to share scales, some access roads and parking area with York Region Recycling Facility • Potential to thermally treat Recycling Facility residues

Table 4.4 Technical Considerations - Application of Short-List Evaluation Criteria

Criterion	Indicator	Clarington 01	Clarington 04	Clarington 05	East Gwillimbury 01
	OVERALL:	ADVANTAGE (disadvantages associated with electrical, water, gas and road infrastructure, are more than offset by advantage associated with sewer infrastructure and major advantages associated with adjacent WPCP and Energy Park)	DISADVANTAGE (disadvantages associated with electrical, water, sewer, gas and road infrastructure, as well as the disadvantage associated with less viable heat loads; are not offset by the potential to thermally treat biosolids at adjacent WPCP)	NEUTRAL (disadvantages associated with electrical, water, sewer, gas and road infrastructure, are offset by major advantages associated with adjacent WPCP and Energy Park)	ADVANTAGE (major disadvantage associated with potential sewer infrastructure and disadvantage with limited potential heat loads; are more than offset by the advantages associated with electrical, water, gas and road infrastructure, and advantage of potential synergies with York Recycling facility)
Design /Operational Flexibility Provided by Site	Area surplus to minimum requirement provided by site	<u>ADVANTAGE</u> • Useful Area 12.4 ha • Surplus Area 4.2 ha	<u>ADVANTAGE</u> • Useful Area 13.8 ha • Surplus Area 5.5 ha	<u>ADVANTAGE</u> • Useful Area 14.8 ha • Surplus Area 6.7 ha	<u>NEUTRAL</u> • Useful Area 8.7 ha • Surplus Area 0.5 ha
	OVERALL:	ADVANTAGE (site has significant surplus area)	ADVANTAGE (site has significant surplus area)	ADVANTAGE (site has significant surplus area)	NEUTRAL (site has some surplus area)
OVERALL EVALUATION: TECHNICAL CONSIDERATIONS		ADVANTAGE	NEUTRAL	ADVANTAGE	ADVANTAGE

Table 4.5 Legal Considerations - Application of Short-List Evaluation Criteria

Criterion	Indicator	Clarington 01	Clarington 04	Clarington 05	East Gwillimbury 01
Complexity of Required Approvals	Nature of approvals required.	DISADVANTAGE • *EAA*: Schedule 'B" Class EA requirements extension of sewer and water services • *CAA:* Watercourse crossing for gas service. Approval for stormwater management. • *PTHIA:* Extension of Natural Gas infrastructure under Hwy 401.	DISADVANTAGE • *EAA:* Schedule 'B" Class EA requirements extension of sewer and water services • *CAA:* Approval required for watercourse crossing for sanitary sewer service. Watercourse crossing for gas service. Approval for stormwater management. • *PTHIA*: Extension of Watermain infrastructure under Hwy 401. Extension of Natural Gas infrastructure under Hwy 401.	DISADVANTAGE • *EAA*: Schedule 'B" Class EA requirements extension of sewer and water services • *CAA:* Watercourse crossing for gas service. Approval for stormwater management. • *PTHIA:* Extension of Natural Gas infrastructure under Hwy 401.	DISADVANTAGE • *EAA:* Schedule 'B" Class EA requirements extension of sewer services • *CAA:* Potential Approval for multiple watercourse crossings for sanitary sewer service. Approval for stormwater management. • *PTHIA:* Potential Extension of Sewer infrastructure under Hwy 404. • Regional Official Plan amendment maybe required due to Waste Management Policies 6.8.2 and 6.8.3
	OVERALL:	DISADVANTAGE	DISADVANTAGE	DISADVANTAGE	DISADVANTAGE
Complexity of Required Agreements	Nature of property acquisition (related to the need for expropriation, Region owned or willing seller site).	ADVANTAGE • Assume all linear infrastructure developed within existing right-of-way	DISADVANTAGE • Site is Privately owned, land acquisition required • Assume all linear infrastructure developed within existing right-of-way	DISADVANTAGE • Site is Privately owned, land acquisition required • Assume all linear infrastructure developed within existing right-of-way	ADVANTAGE • Assume all linear infrastructure developed within existing right-of-way
	OVERALL:	ADVANTAGE	DISADVANTAGE	DISADVANTAGE	ADVANTAGE
	OVERALL EVALUATION: LEGAL CONSIDERATIONS	NEUTRAL	DISADVANTAGE	DISADVANTAGE	NEUTRAL

Where possible, the following decision making guidelines were applied in the summation of advantages and disadvantages to determine the overall Category rankings:

- An advantaged criteria would offset a disadvantaged criteria within the same category;
- The combining of a major disadvantage with an advantage typically results in an overall disadvantage;
- Multiple advantages or disadvantages within a category do not constitute an overall major advantage or major disadvantage for the category; and,
- When two (2) criteria rankings are identified, and one (1) is Neutral the summary of the two (2) criteria will reflect the other criteria (ie. an advantage or disadvantage).

In certain circumstances, professional judgement was applied by the consultant team to ensure the degree of advantage or disadvantage of a particular impact or benefit was taken into account. The following Table 4.6 provides an overview how the individual criteria rankings were combined to determine the overall advantages and disadvantages of each of the categories of the environment.

Table 4.6 Summary of Short-List Sites Advantages and Disadvantages

Criterion	Clarington 01	Clarington 04	Clarington 05	East Gwillimbury 01
Public Health and Safety and Natural Environmental Considerations				
Air Quality Impacts	NEUTRAL	DISADVANTAGE	NEUTRAL	NEUTRAL
Water Quality Impacts (Surface Water and Groundwater)	ADVANTAGE	NEUTRAL	NEUTRAL	DISADVANTAGE
Environmentally Sensitive Areas and Species Impacts	NEUTRAL	ADVANTAGE	DISADVANTAGE	DISADVANTAGE
Aquatic and Terrestrial Ecology Impacts	ADVANTAGE	DISADVANTAGE	MAJOR DISADVANTAGE	DISADVANTAGE
OVERALL:	**ADVANTAGE**	**NEUTRAL**	**MAJOR DISADVANTAGE**	**DISADVANTAGE**
Social and Cultural Considerations				
Compatibility with Existing and/or Proposed Land Uses	MAJOR ADVANTAGE	DISADVANTAGE	DISADVANTAGE	NEUTRAL
Residential Areas	ADVANTAGE	MAJOR DISADVANTAGE	NEUTRAL	DISADVANTAGE
Parks and Recreational Areas	NEUTRAL	ADVANTAGE	ADVANTAGE	ADVANTAGE
Institutional Facilities or Areas	ADVANTAGE	ADVANTAGE	ADVANTAGE	ADVANTAGE
Archaeological and Cultural Resources	DISADVANTAGE	ADVANTAGE	MAJOR DISADVANTAGE	NEUTRAL
Potential Traffic Impacts	NEUTRAL	DISADVANTAGE	NEUTRAL	DISADVANTAGE
OVERALL:	**ADVANTAGE**	**DISADVANTAGE**	**DISADVANTAGE**	**NEUTRAL**
Economic/Financial Considerations				
Capital Costs	NEUTRAL	DISADVANTAGE	DISADVANTAGE	ADVANTAGE

Criterion	Clarington 01	Clarington 04	Clarington 05	East Gwillimbury 01
Operation and Maintenance Costs	ADVANTAGE	NEUTRAL	ADVANTAGE	DISADVANTAGE
OVERALL:	**ADVANTAGE**	**DISADVANTAGE**	**NEUTRAL**	**NEUTRAL**
Technical Considerations				
Compatibility with Existing Infrastructure	ADVANTAGE	DISADVANTAGE	NEUTRAL	ADVANTAGE
Design/Operational Flexibility Provided by Site	ADVANTAGE	ADVANTAGE	ADVANTAGE	NEUTRAL
OVERALL:	**ADVANTAGE**	**NEUTRAL**	**ADVANTAGE**	**ADVANTAGE**
Legal Considerations				
Complexity of Required Approvals	DISADVANTAGE	DISADVANTAGE	DISADVANTAGE	DISADVANTAGE
Complexity of Required Agreements	ADVANTAGE	DISADVANTAGE	DISADVANTAGE	ADVANTAGE
OVERALL:	**NEUTRAL**	**DISADVANTAGE**	**DISADVANTAGE**	**NEUTRAL**

When considering the advantages and disadvantages identified above, in the context of priorities established by the community as described in Section 3.2.2. above, Table 4.7 below shows the overall relative comparison of each site.

Table 4.7 Overall Relative Comparison of Sites

Environmental Category	Clarington 01	Clarington 04	Clarington 05	East Gwillimbury 01
PRIORITY: HIGH				
Public Health and Safety and Natural Environment Considerations	ADVANTAGE	NEUTRAL	MAJOR DISADVANTAGE	DISADVANTAGE
PRIORITY: MEDIUM				
Social and Cultural Considerations	ADVANTAGE	DISADVANTAGE	DISADVANTAGE	NEUTRAL
Economic/Financial Considerations	ADVANTAGE	DISADVANTAGE	NEUTRAL	NEUTRAL
Technical Considerations	ADVANTAGE	NEUTRAL	ADVANTAGE	ADVANTAGE
PRIORITY: LOW				
Legal Considerations	NEUTRAL	DISADVANTAGE	DISADVANTAGE	NEUTRAL
Overall:	**ADVANTAGE**	**DISADVANTAGE**	**DISADVANTAGE**	**NEUTRAL**

Based on the consideration of the advantages and disadvantages and the priorities associated with each of the environmental considerations noted above in Table 4.7, the Recommended

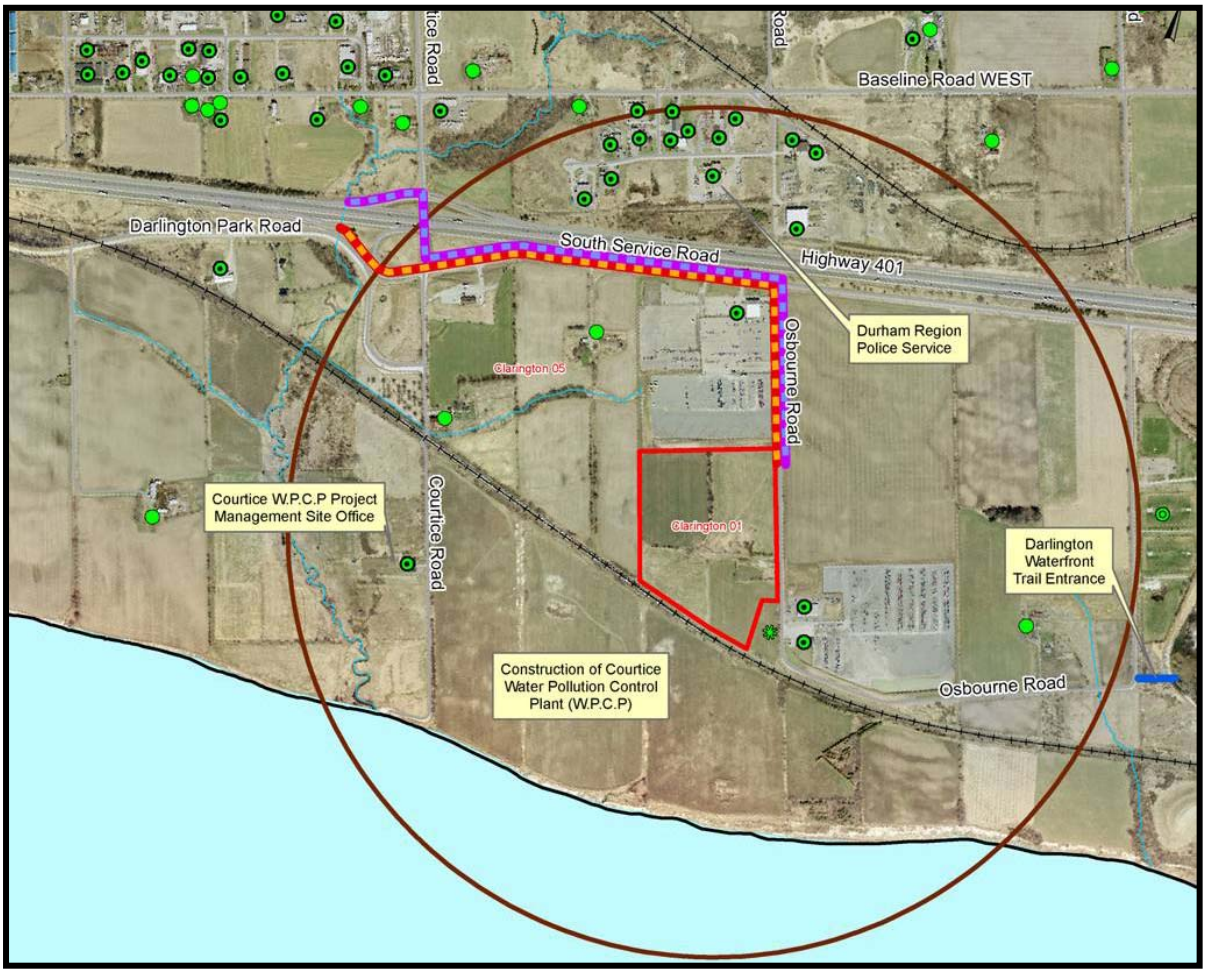
Preferred site to manage the post-diversion or residual wastes from the proposed thermal treatment facility is Clarington 01.

5. Description of Recommended Preferred Site, Clarington 01

5.1 Recommended Preferred Site Description

Site Clarington 01 is undeveloped land owned by the Region of Durham, south of Highway 401 in the Municipality of Clarington. The site is located on the west side of Osbourne Road north of a CN Rail corridor. There are commercial properties north of the site. The lands east and west of the site are undeveloped and are currently used for agricultural purposes. The Courtice Water Pollution Control Plant, which is scheduled to be completed in 2007, is being built just south of the site. The Darlington Nuclear Generating Station is located approximately 0.5 kilometres to the east. The nearest major intersection is Highway 401 and Courtice Road, which is approximately 1.7 kilometres from the site. The site is approximately 12.1 hectares in area and is located in the Clarington Energy Park.

Figure 5-1 Recommended Preferred Site Location



5.2 Summary of Recommended Preferred Site Advantages identified

The following provides a list of the key advantages related to the Clarington 01 site:

- Provides the shortest round-trip distances traveled for the transportation of waste resulting in the highest haul cost savings of all the sites;
- Site provides the least potential impact to water quality when compared to all other sites;
- Site has no on-site hazard lands or other natural features that could constrain development;
- Site has no potential aquatic habitat on site;
- Site is most compatible with surrounding land uses when compared other sites;
- Site is the furthest from a designated residential area (existing or planned);
- Site is close to potential market for heat (both existing and future potential); and,
- Site is owned by Region of Durham and property acquisition is not required.

5.3 Summary of Recommended Preferred Site Disadvantages identified

The following provides a list of the key disadvantages related to the Clarington 01 site where mitigative measures will be required:

- Potential disadvantage with respect to the sites close proximity to highway 401 and the vehicular emissions related to this transportation route;
- Potential does exist, as with most of the other sites, for the presence of species of conservation of concern;
- Site has a high potential for the presence of prehistoric and historic archaeological resources which is common for most properties located close to the lakeshore;
- Development of electrical infrastructure may be required to market electrical energy;
- Site requires extension of water and natural gas servicing which may require additional approvals; and,
- Haul route requires approximately 1.2 kilometres of roadway improvements.

6. Next Steps

The following provides an outline of the next steps in the completion of the Durham/York Residual Waste Study.

6.1 Public and Agency Consultation

On September 25, 2007 the Joint Waste Management Group will receive the Consultants Recommendation on the Preferred Site and will be requested to authorize the release of this document for public and agency consultation. With authorization, the public and agency consultation will be completed as follows:

- The consultant team's report will be released to the public and government review agencies for a period of 30 days starting on September 26, 2007 and ending on October 28, 2007.
- Notification will be issued of the availability of the draft report by way of direct contact with the established public and government review agency list and by way of the website and local media for the general public.
- Copies of the draft documentation will be forwarded to the public and government agencies in the established contact lists and copies placed in the local libraries, municipal offices and on the study website for public review.
- Public Information Sessions will be held in both Durham and York during October, 2007. These sessions will be held to allow the public an opportunity to ask questions of the consultants and Regional staff.
- A telephone poll will be conducted during late October or early November, 2007, reaching individuals in Durham and York Regions to determine their support for the Recommended Preferred site.
- Comments received during the draft report review period will be documented and included in the final report on the Recommended Preferred site to be submitted to both Regional Councils for approval. Comments received will be considered and addressed, as appropriate, during finalization of this report.

6.2 Schedule/Timeline for Completion

The following presents an estimated Study schedule from release of this document for public and agency consultation to implementation of a proposed undertaking. This schedule will be updated as Study steps and implementation activities are completed.

Table 6.1 Estimated Schedule for Completion of Project

Project Milestone	Estimated Timeframe
Previous Milestones Achieved	
Prepare EA Terms of Reference	2005
Submit EA Terms of Reference to Minister for Approval	December 2005 – Approved March 2006 by Minister of the Environment
Initiate EA Study	March 2006
Evaluate "Alternatives To" the Undertaking (i.e. Technologies)	2006

Table 6.1 Estimated Schedule for Completion of Project

Project Milestone	Estimated Timeframe
Select Preferred Approach to Manage Residual Wastes	Approved by Durham and York Regional Councils in June 2006
Future Milestones	
Evaluate "Alternative Methods" of Implementing the Undertaking (i.e. Siting) and competitive process to Identify a Preferred Technology Vendor	2006/ 2007
Select Preferred Site	Late 2007
Prepare Interim EA Planning Document	Late 2007/Early 2008
Select Preferred Vendor	Mid 2008
Complete Site Specific Studies to Confirm Suitability	Late 2007/2008
Finalize all Documentation to Support Approvals and Submit Applications	Late 2008/Early 2009
Submit EA Documentation to Minister for Review	2009
Implementation of Preferred Undertaking	Mid 2009 to Early 2011

6.3 Preparation of an Interim EA Planning Document

Following the approval of the Preferred site by Durham and York Regional Councils, an Interim EA Document will be prepared. This document will outline the EA process followed to date, including:

- Development and approval of the EA Terms of Reference;
- Evaluation of "Alternatives to" and the identification of thermal treatment as the Preferred system; and,
- Evaluation of "Alternative Methods" and the identification of the Preferred site.

This document will form the basis of the draft EA document that will be submitted to the Minister of the Environment in late 2008/early 2009. Over the course of 2008, the Interim EA Planning document will be updated as additional studies are completed and the preferred technology vendor is identified.

6.4 Competitive Process to Identify the Preferred Technology Vendor

The engagement of the private sector to Design, Build and Operate the proposed thermal treatment facility is being undertaken in two (2) stages as follows:

Stage 1: This Request for Qualifications

On July 12, 2007, Durham Region's Finance Department, co-ordinated and issued a Request for Qualifications (RFQ) for the Thermal Treatment of Residual Waste. The issuance of this RFQ along with the Request for Proposals (scheduled to be issued in January 2008) form part of the evaluation of "Alternative Methods" and will be documented in a separate summary report.

The release of the RFQ is the first step in the process of the Regions of Durham and York identifying, assessing the qualifications of, and ultimately selecting a developer and a specific form of thermal treatment technology that meets the aforementioned principles. Those proponents who respond to this RFQ, and satisfy its requirements, will be qualified to submit a detailed proposal to the two Regions in response to a Request for Proposals (RFP) anticipated to be issued in early 2008.

Stage 2: The Request for Proposal Process

Following completion of the RFQ stage, Qualified Respondents will be invited to provide detailed proposals in response to an RFP that will include the design, construction and operating contract (collectively the "RFP"). The RFP will describe the Regions' requirements and performance expectations for design, construction and operation of the thermal treatment facility. The Regions will evaluate the detailed proposals received from the Qualified Respondents. The Regions will also seek any necessary clarifications, and then determine whether the Regions' objectives can be met. After reviewing the RFP submissions, the successful Qualified Respondent (the "Preferred Vendor") will be selected for the purposes of concluding a contract.

A summary of the anticipated roles and responsibilities of each party is provided below. These roles and responsibilities are only provided for indicative purposes and may be amended by the Regions in the development of the RFP:

6.4.1 Facility Design, Construction and Operation Roles and Responsibilities

The Roles and Responsibilities for both the Region and the Preferred Vendor, as outlined in the RFQ are presented below:

Regions' Responsibilities:

- Own the EFW Facility;
- Select and provide the site to host the EFW Facility based on the results of the EA Study;
- Work with the Preferred Vendor to obtain environmental approvals and municipal land-use approvals;
- Determine the size of the EFW Facility;
- Guarantee waste supply;
- Determine the need for future expansion or modifications to the EFW Facility;
- Develop the specifications for the design and construction portion of the contract which, for the purposes of this RFQ, is assumed to be for a period of 2 years;
- During the construction period, monitor, inspect construction progress and at key milestones approve and issue payments;
- Develop the terms of the operating portion of the contract;
- During the operational period, monitor, inspect and approve performance and make regular progress payments; and
- Assume all responsibilities and risks related to the sale of energy (electricity and/or useful thermal energy) and recyclables.

Preferred Vendor's Responsibilities:

- Assist with environmental approvals and other approvals as required (e.g. building permits, servicing agreement, health and safety, etc.);

- Provide the Thermal Treatment Technology;
- Design and construct the EFW Facility to the performance and size specifications developed by the Regions;
- Finance all construction obligations between milestone progress periods payments;
- Implement expansions and modifications to the EFW Facility as directed by the Regions;
- Operate and maintain the EFW Facility;
- During the operational period, comply with performance specifications developed by the Regions;
- Finance operations between milestone contract payments; and
- Meet environmental and health and safety requirements.

6.4.2 RFQ Evaluation Criteria

Respondents to the RFQ are being requested to provide information related to each of the evaluation criteria identified in the RFQ and outlined below:

- **Criterion 1: Reference Facilities**
  - 1a: Capacity and Availability
  - 1b: Involvement of RFQ Respondent in Reference Facilities
  - 1c: Compliance and Mitigation Program for the Reference Facilities
  - 1d: Description of Reference Facility Process and Operations
  - 1e: Integration of the Reference Facilities into Host Community
- **Criterion 2: EFW Facility**
  - 2a: Proposed Project Team
    - 2a i: Related Corporate Experience of RFQ Respondent
    - 2a ii: Organization of RFQ Respondent
    - 2a iii: Human Resource Capabilities
  - 2b: EFW Facility
    - 2b i: Ability of Proposed Facility to Meet Objectives
    - 2b ii: Description of Proposed Facility
- **Criterion 3: References**
  - 3a: References for Reference Facilities
  - 3b: References for RFQ Respondent
- **Criterion 4: Financial Requirements**
  - 4a: Financial Condition
  - 4b: Financial Capacity
  - 4c: Track Record and Experience

6.4.3 RFQ/RFP Process Schedule

Table 6.2 Anticipated Key Milestone Dates related to RFQ and RFP

Project Milestone	Estimated Timeframe
Recommendation of Consultants Recommended Preferred Site	September 2007
Council Decision on Preferred Site	December 2007
RFQ Issued	July 12, 2007

Table 6.2 Anticipated Key Milestone Dates related to RFQ and RFP

Project Milestone	Estimated Timeframe
Deadline for Inquiries	September 14, 2007
Deadline for Addenda and Clarifications	September 21, 2007
RFQ Closes	October 11, 2007
RFQ Evaluation Period	October to December 2007
Preparation of RFP Documentation	July 2007 to January 2008
Council Approves Qualified Respondents	January 2008
Council Approval to Release RFP	January 2008
Issue RFP	February 2008

The above dates are tentative and subject to change at the sole discretion of the Regions.

Durham/York Residual Waste Study

Appendices to

Thermal Facility Site Selection Process

Results of Step 7: Evaluation of Short-List of Sites and Identification of Preferred Site

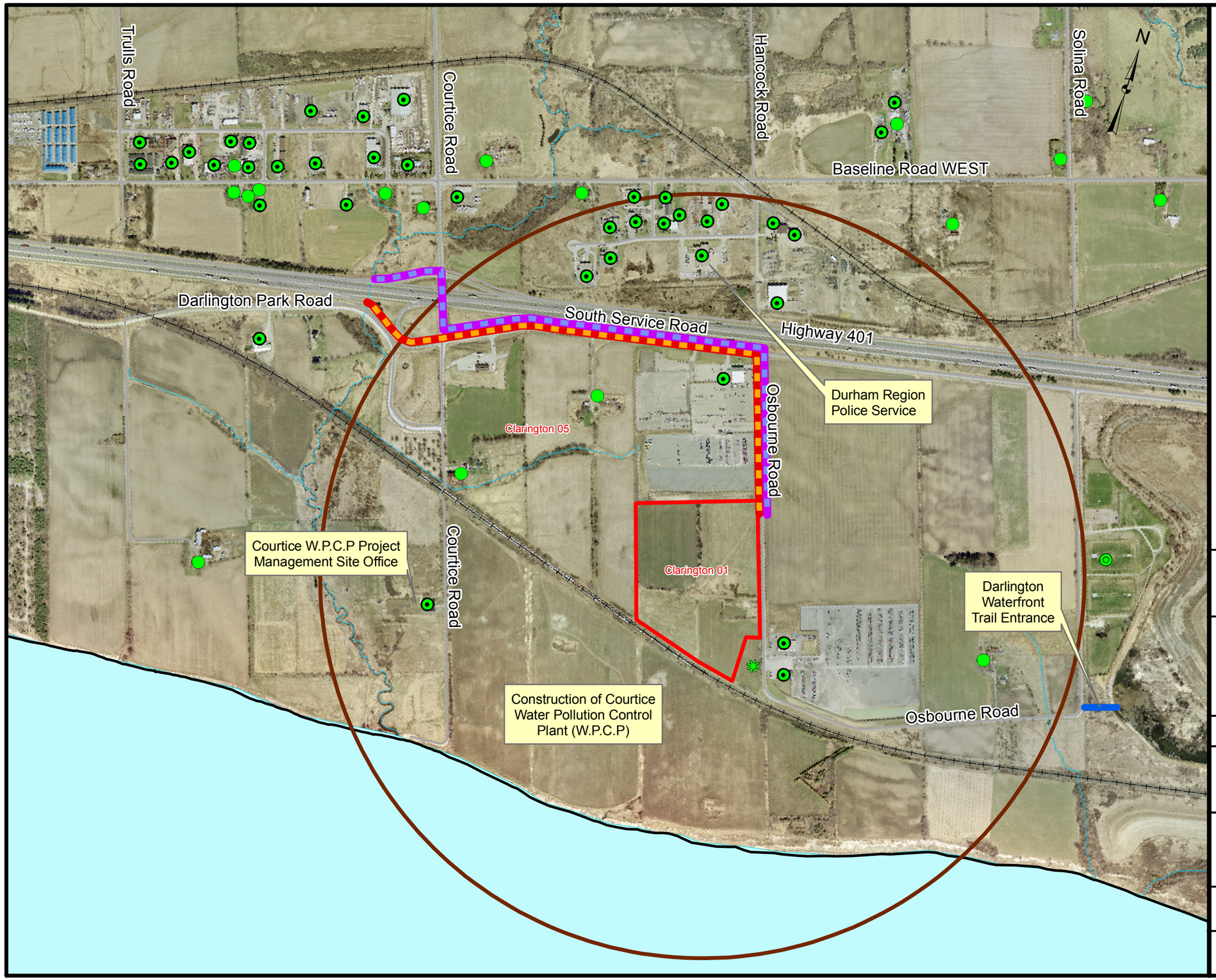
September, 2007

GENIVAR

Jacques Whitford

APPENDIX A

SHORT-LIST SITE MAPS



Legend

- Alternative Site
- 1 km Radius from Potential Site
- Waterbody
- Watercourse
- Roadway
- Local Municipal Boundary
- Inbound Haul Route
- Outbound Haul Route
- Business
- Residential
- Recreational Facility
- Courtice WPCP Construction Entrance

GENIVAR

Jacques Whitford

DURHAM REGION

York Region

Residual Waste Study

September 2007

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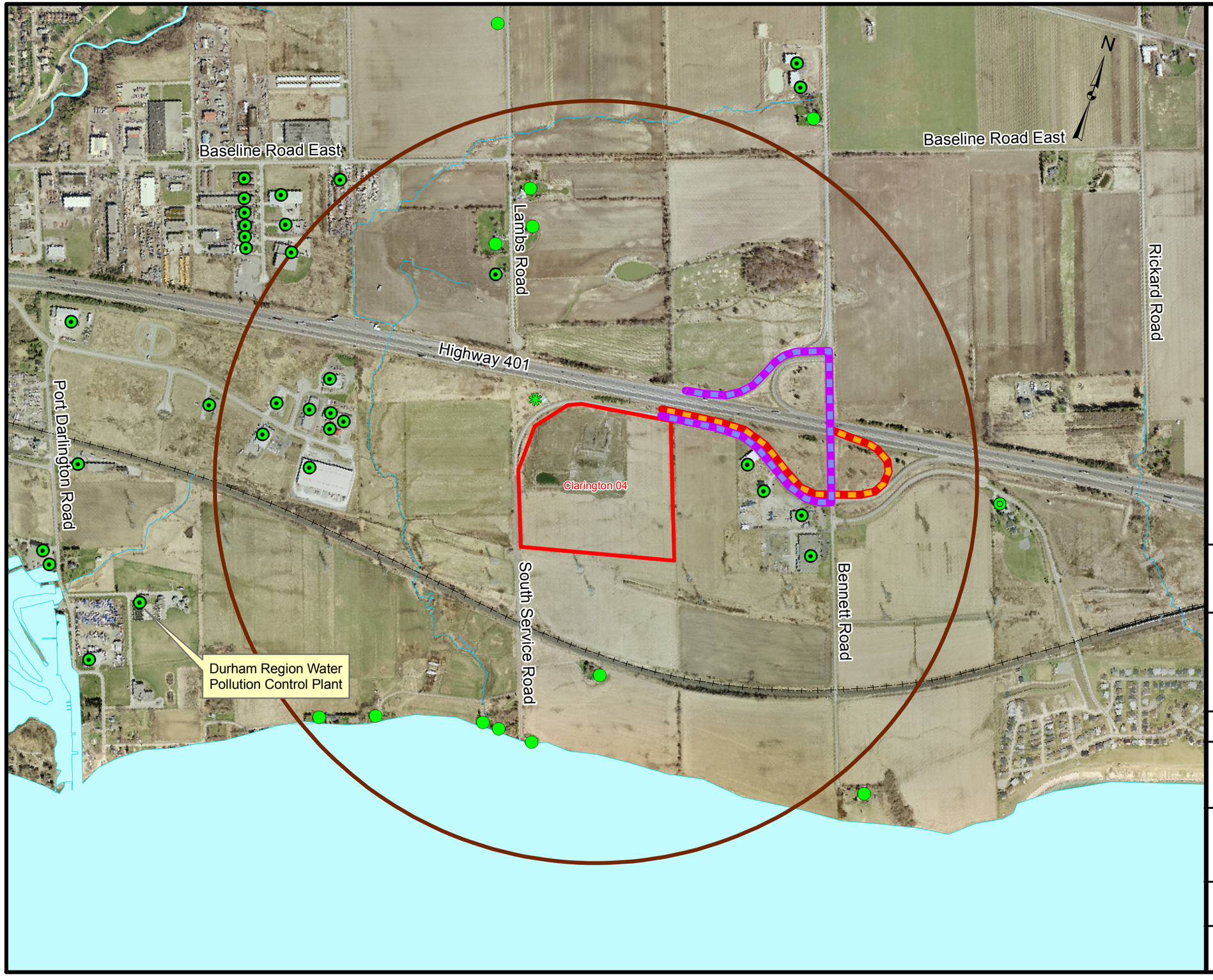
Durham / York Residual Waste Study

Clarington 01



Legend

- 1 km Radius from Potential Site
- Alternative Site
- Waterbody
- Watercourse
- Roadway
- Inbound Haul Route
- Outbound Haul Route
- Local Municipal Boundary
- Business
- Recreational
- Residential
- Utilities

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DURHAM REGION

York Region

Residual Waste Study

September 2007

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Durham / York Residual Waste Study

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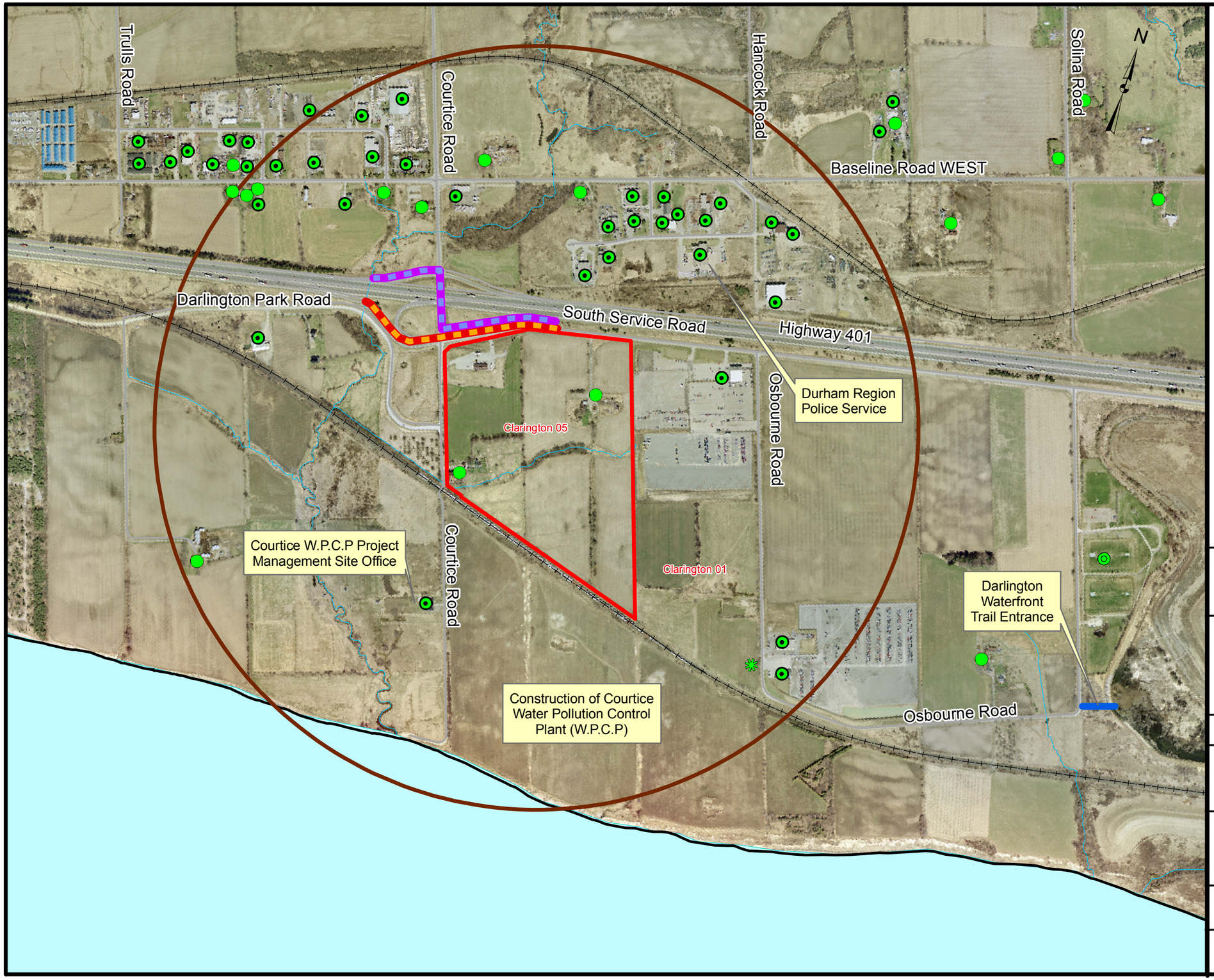

Legend

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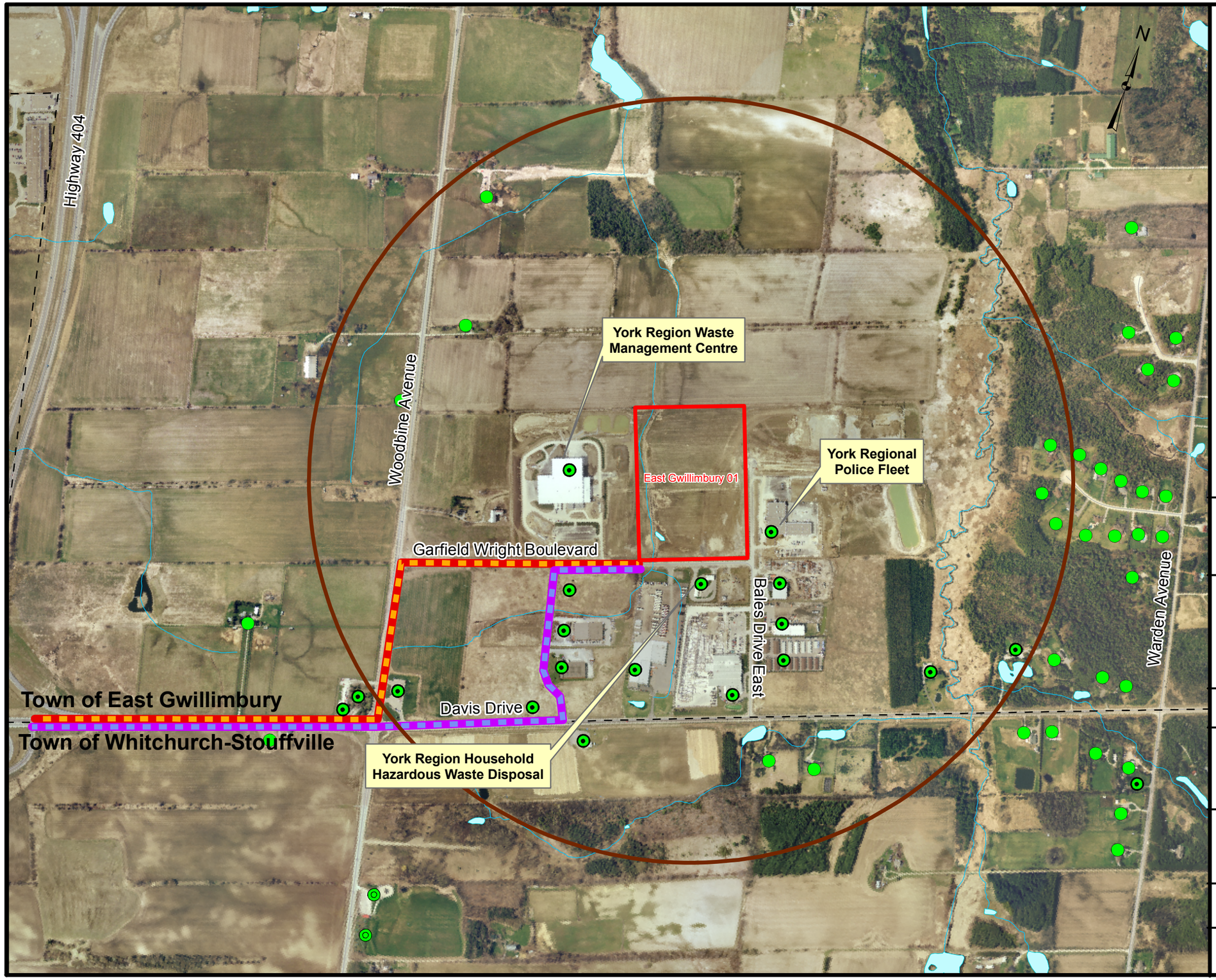

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- 1 km Radius from Alternative Site
- Waterbody
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- Outbound Haul Route
- Business
- Recreational
- Residential

GENIVAR

Jacques Whitford

DURHAM REGION

York Region

Residual Waste Study

September 2007

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Durham / York Residual Waste Study

East Gwillimbury 01

APPENDIX B

DOCUMENTATION SUPPORTING REVISIONS TO SHORT-LIST

NOTICE THAT REGIONAL COUNCIL'S DECISION IS FINAL

WITH RESPECT TO

AMENDMENT #35

TO THE DURHAM REGIONAL OFFICIAL PLAN

DURHAM REGION PLANNING
RECEIVED
MAR 2 2 2007
ATTENTION COPIES TO
KY/VC
FILE#

Further to Regional Council's decision to adopt Amendment #35 to the Durham Regional Official Plan, by By-law #06-2007 on February 14, 2007, this is to advise that no notices of appeal were received within the specified appeal period.

Therefore, in accordance with Subsection 17(27) of the Planning Act, the decision is final and in full force and effect as of March 21, 2007.

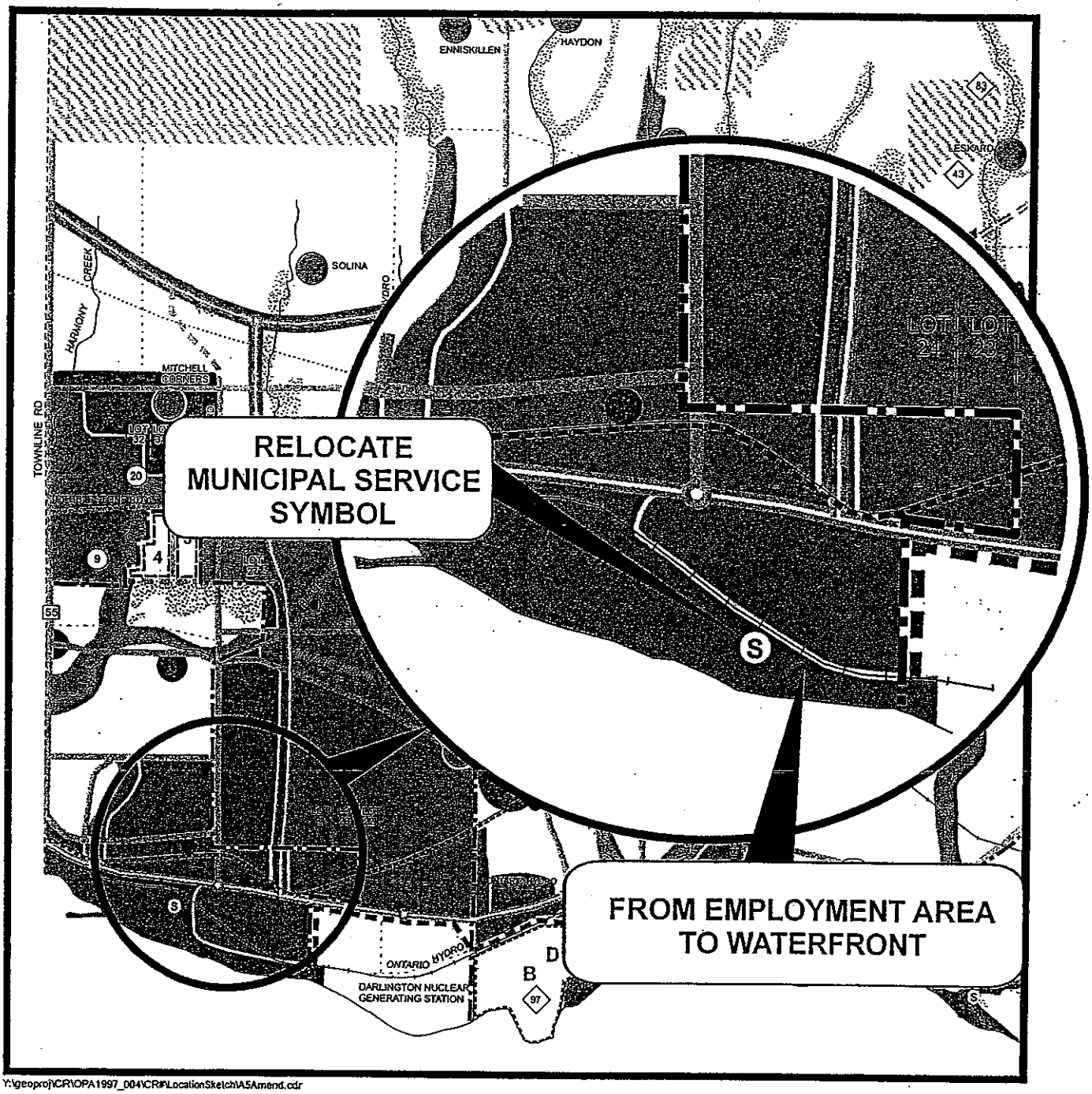
Clerk

Proposed Amendment #35 to the Durham Regional Official Plan

Purpose:	The purpose of this Amendment to the Durham Regional Official Plan is to redesignate Employment Area Lands to Waterfront and to relocate a Municipal Service symbol "S" to the east side of Courtice Road.
Location:	Part of Lots 26 to 28, Broken Front Concession, Former Township of Darlington, Municipality of Clarington.
Basis:	To establish an expanded waterfront open space area in this location that will accommodate recreational and municipal service uses. In accordance with Section 5.3.8, the Region's water pollution control plant is permitted in the waterfront designation.
Actual Amendment:	The Durham Regional Official Plan is hereby amended by amending Map A5 – Regional Structure as indicated in Exhibit "A" attached to this Amendment.
Implementation:	The provisions set forth in the Durham Regional Official Plan regarding the implementation of the Plan shall apply in regard to this Amendment.
Interpretation:	The provisions set forth in the Durham Regional Official Plan regarding the interpretation of the Plan shall apply in regard to this Amendment.

OFFICIAL PLAN OF THE REGIONAL MUNICIPALITY OF DURHAM

REGIONAL STRUCTURE MAP A5



Y:\geoproj\CR\OPA1997_004\CR#LocationSketch\A5Amend.cdr

LEGEND

- URBAN AREA BOUNDARY
- LIVING AREA
- EMPLOYMENT AREA
- PERMANENT AGRICULTURAL RESERVE
- PERMANENT AGRICULTURAL RESERVE SUBJECT TO SECTION 14.3
- MAIN CENTRAL AREA
- SUB CENTRAL AREA
- S MUNICIPAL SERVICE
- GENERAL AGRICULTURAL AREA
- OAK RIDGES MORAINE
- WATERFRONT
- HAMLET
- 2 SPECIAL STUDY AREAS
- 74 RESOURCE EXTRACTION AREAS (SEE SCHEDULE 4 FOR DESCRIPTION)
- MAJOR OPEN SPACE
- WATERFRONT LINKS
- 8 COUNTRY RESIDENTIAL SUBDIVISION (SEE SCHEDULE 5 FOR DESCRIPTION)
- ENVIRONMENTALLY SENSITIVE AREAS
- D2 DEFERRED BY THE MINISTER OF MUNICIPAL AFFAIRS

	EXISTING	FUTURE
ARTERIAL ROAD		
FREEWAY		
GO RAIL		
GO STATION		

NOTICE OF PROPOSED DECISION OF THE COUNCIL OF THE REGIONAL MUNICIPALITY OF DURHAM FOR A DEFERRED PORTION OF THE OFFICIAL PLAN OF THE MUNICIPALITY OF CLARINGTON

Subsection 17(22) of the Planning Act

The Council of the Regional Municipality of Durham, as the approval authority, made a proposed decision on February 14, 2007 to grant approval to a part of the Municipality of Clarington Official Plan that had previously been deferred by Regional Council. This part is referenced as Deferral #32 to the Municipality of Clarington Official Plan.

PURPOSE AND EFFECT:

This Decision designates the lands referenced as Deferral #32 as "Waterfront Greenway" and to relocate the Utility Symbol in the Municipality of Clarington Official Plan. Approving Deferral #32 would permit the expansion of the waterfront open space area that will accommodate recreational and municipal service use.

This matter is detailed on the attached Schedule "A" to this Notice.

WHEN AND HOW TO SUBMIT A REQUEST FOR REFERRAL:

Any request for referral to the Ontario Municipal Board of all, or part, of the decision of the Council of the Regional Municipality of Durham must be received by the Regional Clerk no later than 4:30 p.m. on March 30, 2007.

The request should be addressed to the Regional Clerk, Regional Municipality of Durham, at the address shown below and must:

1. Set out the specific part or parts of the decision to which the request applies;

2. Set out the reasons for the request for the referral; and

3. Be accompanied by a certified cheque, payable to the Ministry of Finance, for $125.00.

WHO CAN REQUEST A REFERRAL:

Only individuals, corporations or public bodies may appeal a decision of the approval authority to the Ontario Municipal Board. An appeal may not be made by an unincorporated association or group. However, a notice of appeal may be made in the name of an individual who is a member of the association or the group on its behalf.

WHEN THE PROPOSED DECISION IS FINAL:

If the Regional Municipality of Durham does not receive any requests for referral in respect of all or part of the proposed decision, upon lapsing of the deadline noted above, the proposed decision or the part of the decision that is not the subject of a request for referral, will be final.

FOR FURTHER INFORMATION:

Information, about the proposed decision is available for public inspection at the Regional Municipality of Durham Planning Department, 605 Rossland Road East, Fourth Floor, P.O. Box 623, Whitby, Ontario and at the Regional Clerk's Department, 605 Rossland Road East, First Floor, Whitby, Ontario, Monday to Friday between 8:00 a.m. and 5:00 p.m. Please contact Neil Henderson, Principal Planner, at (905) 668-7711, Ext. 2559, or 1-800-372-1102, if you have any questions.

DATE OF NOTICE: **February 28, 2007**

MAILING ADDRESS FOR REFERRAL REQUEST

Regional Municipality of Durham
Regional Headquarters Building
605 Rossland Road East
Whitby, Ontario, L1N 6A3

Attention: **Ms. P.M. Madill**
Regional Clerk

MUNICIPALITY OF CLARINGTON OFFICIAL PLAN

1. The following parts of the Municipality of Clarington Official Plan was approved by Regional Council on February 14, 2007 in accordance with the Planning Act.

   a) The lands shown as Deferral #32 on "Map A2 Land Use, Courtice Urban Area" of the Clarington Official Plan, as outlined in the attachment.

Roger Anderson
Regional Chair
Regional Municipality of Durham
605 Rossland Road East
Whitby, ON L1N 6A3

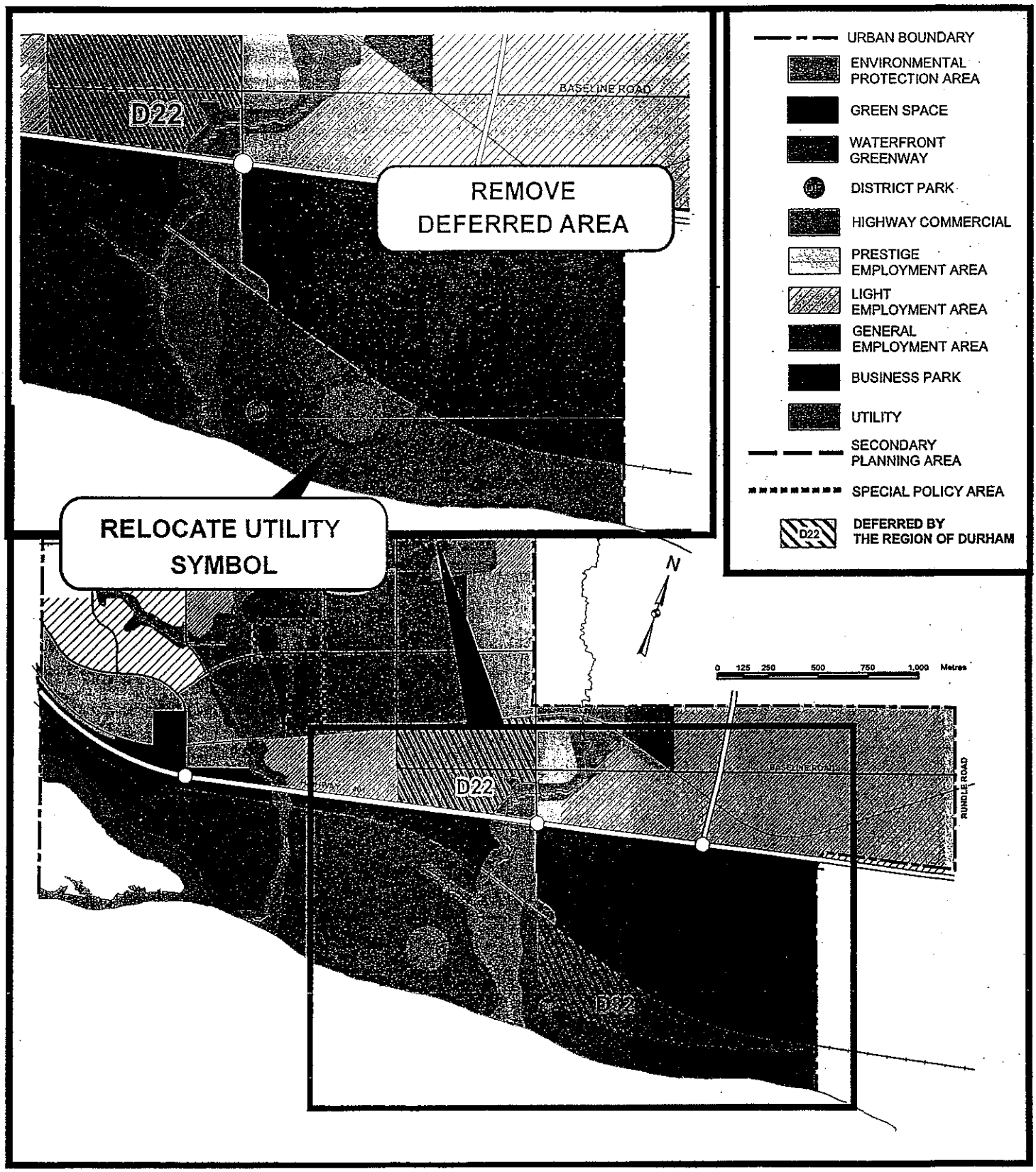
DATED at the Region of Durham, Whitby, Ontario on February 28, 2007.

SCHEDULE 'A'

OFFICIAL PLAN
MUNICIPALITY OF CLARINGTON

JULY 31, 2005

EXTRACT OF MAP A2
LAND USE
COURTICE URBAN AREA



>>> "John Morrison" <John.Morrison@ca.cushwake.com> 4/27/2007 11:31 AM >>>

Dear Mr Herriott,
Thank you for forwarding the Temporary Access Easement and Right of First Refusal Document for review.
Upon further reflection, and taking into consideration competing sites and required timelines for providing a Right of First Refusal, we have decided not to proceed with our submission for our site to be considered for the proposed Thermal Facility Site.
If you have any questions, please don't hesitate to call.
Sincerely,
John Morrison

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Vice President, Land & Investment Sales
Capital Markets Group
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john.morrison@ca.cushwake.com